Public Utilities

FORTNIGHTLY

May 22, 1941

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

"ONE LUMP" "EXTRA CREAM"

"WEAK"

"NO CREAM"

NO MATTER
HOW
FOLKS DRINK
COFFEE

"STRONG"

"TWO LUMPS"

"LIGHT"

"NO SUGAR"

When coffee is brewed in a...

Genuine SILEX

IT PLACES 87 K.W.H. ON YOUR LINE

Practically *everybody* drinks coffee! And SILEX makes better coffee! That's why SILEX is a load-building opportunity for you . . . it's in demand . . . and it adds 87 K.W.H. to your load! (97 K.W.H. with an electric Anyheet Control!) Watch your load climb . . . when you sell more through promotions and displays.

The Silex Co. *Dept. UP-5* Hartford, Conn.
Creators of the Glass Coffee Maker Industry

Push Genuine SILEX and watch your load climb

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THE

Editor—HENRY C. SPURR
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Financial Editor—OWEN ELY

Public Utilities Fortnightly

VOLUME XXVII *May 22, 1941* NUMBER 11

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

Advertising Section

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

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Pages with the Editors

As long as the so-called "power issue" in the Northwest was drawn clearly between public ownership and privately owned utilities, the politicians had a fairly easy time of it, rallying the voters to this standard or that standard. But with private utility ownership beating a strategic retreat to a few well-chosen strongholds, and with local public ownership proponents looking askance at the Federal government and vice versa, a "triangle" has developed which will call upon all the statesmanship and resourcefulness of those concerned to dissolve without waste and acrimony.

In this issue KINSEY M. ROBINSON, president of the Washington Water Power Company, suggests a plan for coöperation among the government, existing municipal electric systems, public utility districts, and the private power companies for handling energy from Bonneville and Grand Coulee. MR. ROBINSON'S company operates principally in Spokane, Washington, where the public ownership movement suffered an election loss last month.

MR. ROBINSON'S record as an efficient utility operator is evidenced by the fact that the Idaho Power Company, of which he was president last year, won the Coffin award—a national water-heating award. MR. ROBINSON will also be recalled as the principal speaker on national defense needs at the 1940 annual Edison Electric Institute convention. After all, public ownership and private ownership have lain down together peacefully in many European countries for many years. Just why they have to go on fighting in America has become a puzzle to real students of industrial history here and abroad.

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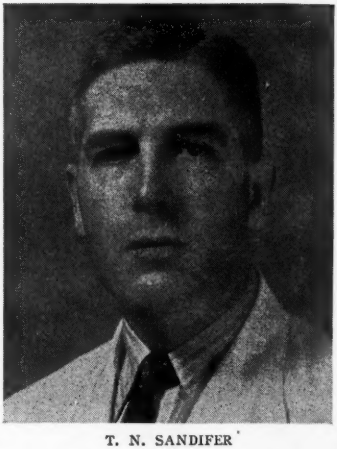
KINSEY M. ROBINSON

Coöperation and fair play are needed to solve the Northwest power problems.

(SEE PAGE 643)



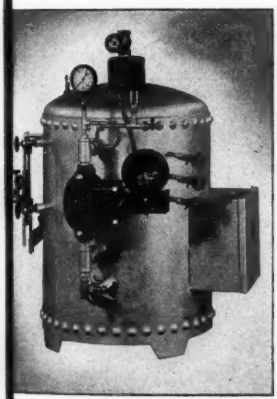
T. N. SANDIFER

Sleepy Santee-Cooper rivers have been called to the colors.

(SEE PAGE 664)

ADVOCATES as well as critics of public river development projects often overlook a distinction between such developments: (1) those which attempt to restore Nature's "balance" or even increase the arable land area, and (2) those which are primarily designed to create some quasi commercial advantage. Of course, in this day of multiple projects, we rarely see any clean-cut line of demarcation. Yet, in a general way, flood-control and reclamation projects would fall in the first group, while power development and navigation improvement would fall in the second.

FOR example, in the governmentally spon-



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sored moving picture, "The River," we saw how the white man's reckless lumber and agricultural operations stripped our country's soil of its protecting cover and brought upon us the woes of erosion, periodic floods, and silted rivers. This was not all waste, of course. The lumber went into homes for millions of people and made the nation what it is today. The agricultural products helped to feed these millions.

BUT now that America is settled and construction methods have changed and our lowering population curve indicates less demand on our forests in the future, we can, and no doubt should, take steps to pay Mother Nature back for the bounty we borrowed. It is, in a sense, the discharging of an obligation towards the heritage of the unborn. These steps include such programs as reforestation, soil erosion control, flood control, and reclamation projects (which actually increase the protecting cover of Mother Nature upon the bald surface of the arid West).

IN the other category there is the St. Lawrence navigation-power proposal. The Brookings Institution in 1929 estimated that three double tracks of freight railroads could be constructed between Chicago and Boston for the cost of the St. Lawrence seaway. And this new hypothetical railroad, which is obviously not needed, could handle thirty times the freight that the half-year icebound water route would bear—quicker, cheaper, and all the year round.

VIEWED in this light, the St. Lawrence proposal is not primarily to restore Nature's balance but to create a new commercial situation which may or may not be economically justified. Indeed, the cutting of deep waterway channels in the St. Lawrence is a rearrangement of the natural water flow which would require continued and expensive dredging to maintain. The only point in making this distinction is that the projects which are predominantly of the first category may fairly have their merits judged on the basis of *conservation*. Those of the second group should be justified on the basis of the balance of *economic factors*—such as a determination of whether the new type of enterprise is needed and, if so, whether that need could be filled by a cheaper substitute.

THIS leaves out the ubiquitous "national defense" argument. But that argument has been spread out so indiscriminately over virtually every spending proposal before Congress that it is hard to say, except in the case of direct military expenditures, just when it has any validity.

OF course, a public project, such as one primarily designed to generate power, can be tied so tightly to the nation's defense effort that it clearly becomes an integral part thereof. An attempt is being made to do this in the newly developing Santee-Cooper project in South Carolina. In this area, a vast concentration of training facilities for Uncle Sam's mighty new Army is taking place. Whether, in the absence of the expensive Santee-Cooper project, electric power could be furnished by other means as cheaply and as dependably will continue to be a debatable question for some time.

THE fact remains that Santee-Cooper is now being mobilized for active duty—probably more so than a number of other public power projects which have been assiduously cultivating a protective coloration of national defense. In this issue, T. N. SANDIFER, veteran Washington newspaper correspondent, gives us a description of what is taking place in the hitherto quiet swamp lands of the sluggish Santee and Congaree rivers.

ROYDEN STEWART

Rural electrification really "got going" in the twenties.

ALSO in this issue is the second of a series of articles on the progress of rural electrification in the United States. The author, ROYDEN STEWART, is an Oklahoman who has been living in New York the past four years. Until recently he was an associate editor and staff writer for the Edison Electric Institute. His fiction and articles have appeared in *The American Mercury, Liberty,* and other magazines and newspapers.

THE next number of this magazine will be out June 5th.

The Editors

(SEE PAGE 651)

In This Issue

In Feature Articles

In Financial News

In What Others Think

In The March of Events

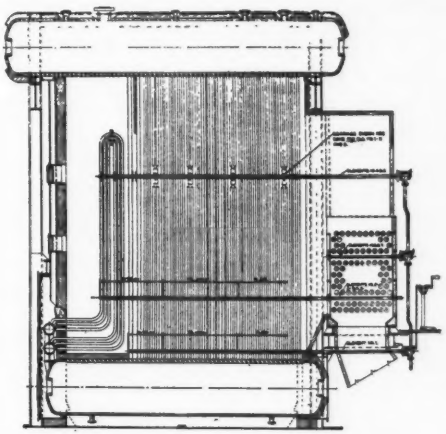
In The Latest Utility Rulings

PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 1–64, from 38 PUR(NS)

Another Example of VULCAN VERSATILITY *in Soot Blower Design*

Vulcan unit makes notable 4 year record in latest design, twin furnace Foster Wheeler steam generator installation at Oil City, Pa., station of the Keystone Public Service Company, operating on fuel relatively high in ash having a low fusion point.



Vulcan unit in twin-furnace Foster Wheeler steam generator completes 4 years' service with NO TROUBLE AND NO MAINTENANCE.

... This despite unusual problems presented by novel boiler and furnace design.

... As the drawing shows it was impracticable to install soot blowers from the front of the boiler as the furnace construction precluded installation of conventional type of elements and bearings to provide necessary protection and support.

... Hence, entry was made at the back necessitating carrying the elements a distance of about 26 ft., through the economizer and boiler tube banks to the superheater.

... Passage through high temperature, intermediate temperature and relatively low temperature zones, plus the factor of exceptional length, greatly complicated the problems of securing adequate thermal protection, dependable support, and at the same time provide for expansion and contraction without danger of cutting tubes.

Solution was found by using HyVULoy element section for the high temperature area, VULcrom element for the intermediate, with the balance steel; and providing specially designed bearings to hold the members in such a way as to eliminate hazard of tube-cutting and directed expansion toward the back of the boiler, where it could be taken up by a suitable expansion joint.

... Because of the advanced design of this boiler involving new features in soot-blower design and construction, Vulcan engineers inspected the installation monthly for many months, but the engineering was so sound that no trouble of any kind developed—Results—Perfect Operation—Perfect Cleaning—Reasonable Cost —And—VULCAN SOOT BLOWERS WERE SPECIFIED when a duplicate Foster Wheeler twin furnace steam generator was recently ordered by Keystone Public Service Company.

... Whatever the characteristics of your boiler and setting, fuel, or load, Vulcan engineers can successfully solve any soot blower installation and operating problem involved. We invite your consideration of Vulcan service with respect to any soot blower need.

VULCAN SOOT BLOWER CORPORATION

DU BOIS, PENNSYLVANIA

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

J. WILLIAM DITTER
U. S. Representative from Pennsylvania.

"Dissipation is not defense."

WILLIAM L. NELSON
U. S. Representative from Missouri.

"Subsidies are, in a sense, stilts. You cannot stand still on stilts."

ALVA B. ADAMS
U. S. Senator from Colorado.

"What is the statute of limitations upon the obligations of political platforms?"

ALBEN W. BARKLEY
U. S. Senator from Kentucky.

" . . . differences of opinion among lawyers are what keep the legal profession alive."

THOMAS J. STRICKLER
President, American Gas Association.

"In every department of our [gas] business the statistics for 1940 make pleasant reading."

ALFRED E. SMITH
Former Governor of New York.

"Defense is not a Democratic party program; to be successful it must be the program of all the people."

EARL C. MICHENER
U. S. Representative from Michigan.

"There is not much else happening in this country at this hour excepting national defense activities."

EDITORIAL STATEMENT
Denver Post.

"The Hoover [Boulder] dam project didn't require the establishment of a special Colorado River Authority."

HEADLINE
Business Week.

"Design for dying? SEC strategy revealed in integrating of UGI properties seems to indicate that 'death sentence' means just that."

FLOYD W. PARSONS
Editorial director, Gas Age.

"The chief 'forgotten man' in recent years in the United States has been the investor, and the principal 'forgotten corporation' has been the utility."

W. A. PATON
Professor of accounting, University of Michigan.

"We attempt to account for things in this world every time the earth makes that lonesome trip around the sun. And there is no easy way to demonstrate how much plant cost should be assigned to revenues during one of these journeys."

CLARENCE F. LEA
Chairman, House Interstate and Foreign Commerce Committee.

"There can be no just effective system of [railroad] regulation where a substantial part of the carriers are unregulated and free to follow their own desires as to their methods of competition."

DANIEL L. MARSH
President, Boston University.

"Certain harsh judgments passed upon the public press by persons high in the present government at Washington warrant our being doubly on guard in this era of war psychosis, mass hysteria, and contagious totalitarianism."

FRANCIS BIDDLE
Solicitor General of the United States.

"To treat administrative procedure as a phenomenon of the fourth decade of the twentieth century, an invention of perverse and radical theorists, is to miss the place of the institution in our governmental process altogether."

ADOLPH J. SABATH
U. S. Representative from Illinois.

"I think that investigations are healthy things. I have served here [U. S. Congress] nearly twenty-eight years and I have never voted against an investigation because I want all the knowledge and all the information on any subject, because it always enables Congress the better to legislate."

EDITORIAL STATEMENT
Broadcasting.

"By a neat legalistic whittling-down process which does abundant credit to its attorneys, the FCC during the last few years has ensconced itself as practically omnipotent in broadcast regulation. An appeal from an FCC decision, no matter what its nature, now is little more than a forlorn hope."

CLARE E. HOFFMAN
U. S. Representative from Michigan.

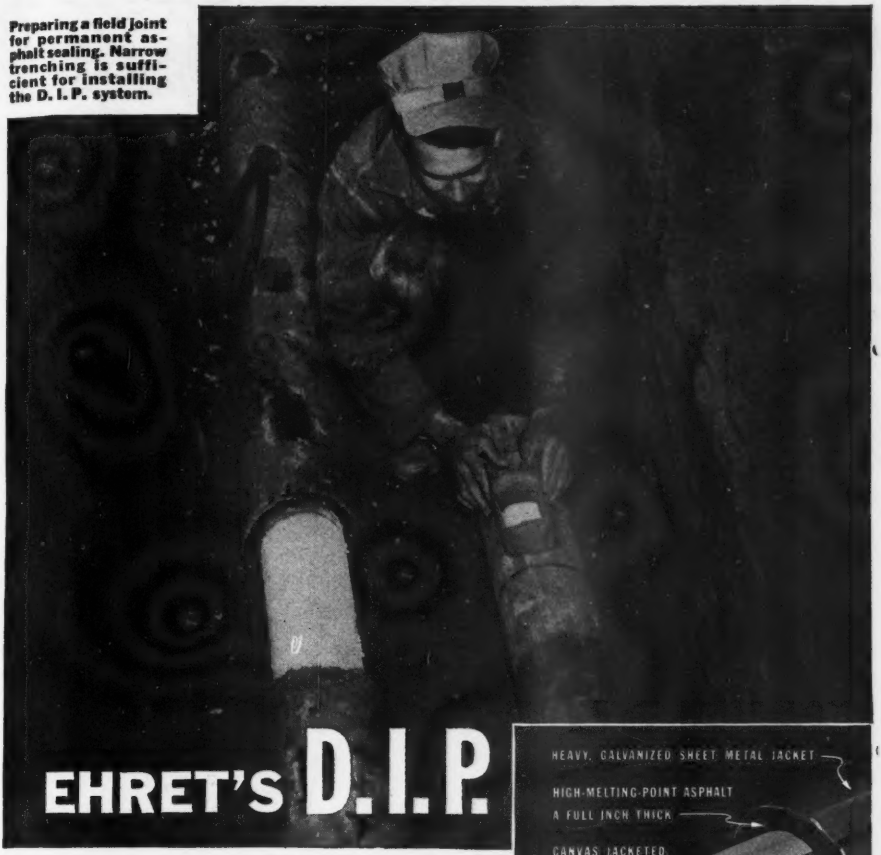
"Why grow eloquent in behalf of the democracies, so-called, of the Old World, while Stalin's emissaries throughout the country and fourteen business agents of the AF of L here in Washington defy the Navy, hurl challenge at the Army, and successfully stop work on government projects?"

FRANK BUTTRAM
President, Independent Petroleum Association of America.

"Because the petroleum industry continually has kept itself in condition for service of its ultimate consumers, we are in a state of complete preparedness. There are no bottle necks in the petroleum industry. Without government subsidy and without special favors or inducements from the government, we can supply what has come to be the very life blood of military and naval operation."

Excerpt from report of Atlantic States Shippers.

"No American will object to the defense needs of America, but honest and sincere opposition must be unafraid to express its protest against projects unsound and objectionable and whose proponents adopt the masquerade of national defense. That opposition must be vigorous until those projects have been proven by fact-finding bodies and not by rhetoric to be an essential part of the necessary defense of America."



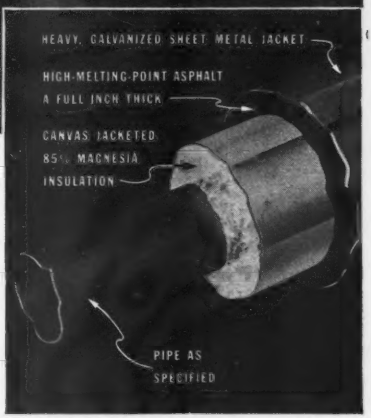
Preparing a field joint for permanent asphalt sealing. Narrow trenching is sufficient for installing the D. I. P. system.

EHRET'S D.I.P.

SETS STANDARDS FOR UNDERGROUND INSULATED PIPING

Ehret's Durant Insulated Pipe combines the high insulating efficiency of 85% Magnesia and the time-defying characteristics of imperishable asphalt. Added to this advantage is factory-fabricated construction which makes field installation both rapid and economical.

Send for the special Ehret booklet on D. I. P. It contains full details on this modern system for underground insulated piping.



Sectional view of Durant Insulated Pipe, showing construction features. Pipe, insulation and protection are factory-fabricated into units.

EHRET MAGNESIA MANUFACTURING COMPANY

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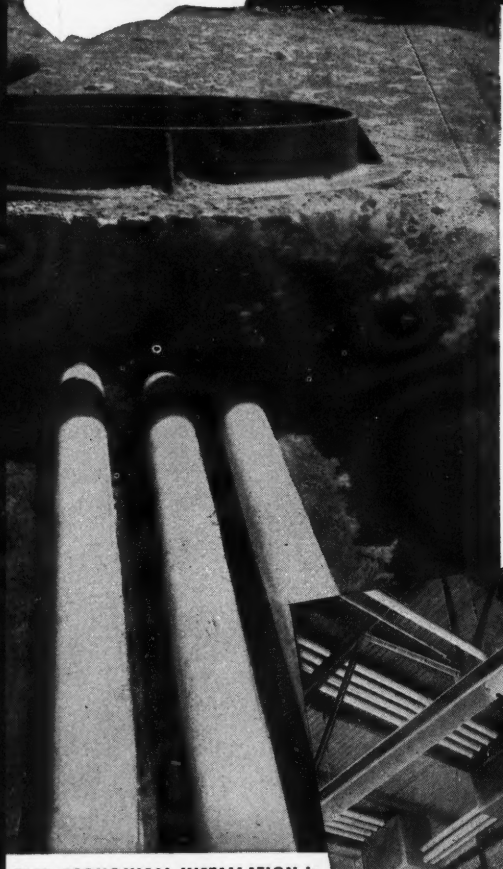
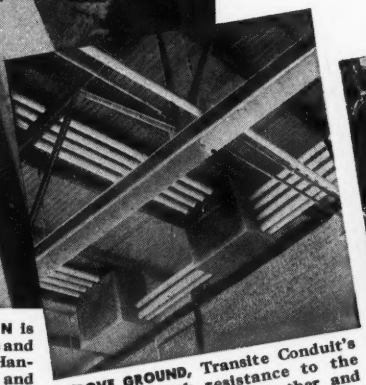
TRANSITE DUCTS COST LESS TO INSTALL

THE long lengths and light weight of Transite Ducts make assembly easy, fast and economical, even when unskilled crews are used. Transite Conduit is so strong it needs no concrete envelope . . . substantially reduces installed costs, particularly where a small number of ducts per trench is involved.

Transite Korduct, for use in concrete, makes further savings because its long lengths mean fewer spacers, fewer joints to make up. Due to its asbestos-cement composition, it requires less concrete separation for equivalent heat dissipation and fire protection between cables. For details, write for brochure DS-410. Johns-Manville, 22 E. 40th St., New York, N.Y.

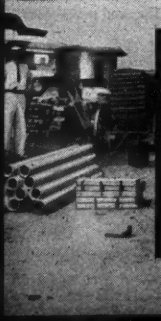


FAST, ECONOMICAL INSTALLATION is assured because of the long lengths and light weight of Transite Ducts. Handling and assembly are simple and easy . . . lining up is rapid and accurate. And when installed underground, Transite Conduit eliminates all the expense of a concrete casing . . . holds its true form under sustained earth loads and traffic pressure.



ABOVE GROUND, Transite Conduit's unusually high resistance to the destructive action of weather and corrosive fumes and gases frequently enables it to outperform more expensive ducts commonly installed in such locations.

TRANSITE KORDUCT, for "concreted-in" jobs, requires fewer spacers, fewer joints, less concrete separation. And its high thermal conductivity dissipates heat rapidly, increasing system capacity. . . .



FOR EFFICIENT, LOW-COST SERVICE, SPECIFY...

JM Johns-Manville

TRANSITE DUCTS

TRANSITE CONDUIT... For use underground without a concrete envelope and for exposed locations.

TRANSITE KORDUCT... For installation in concrete. Thinner walled, lower priced, but otherwise identical with Transite Conduit.

CRAFTSMANSHIP

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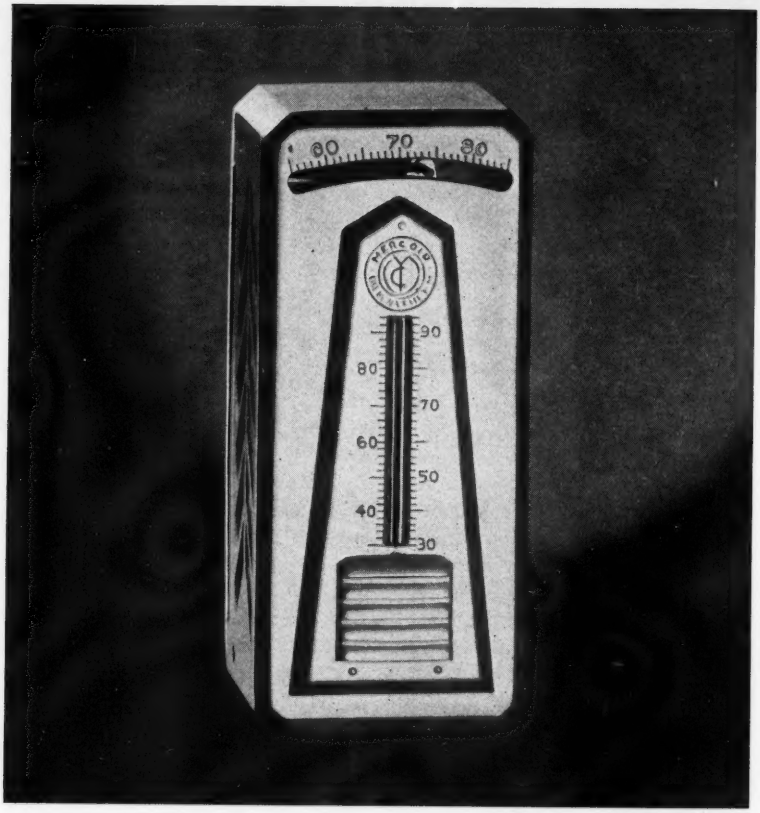
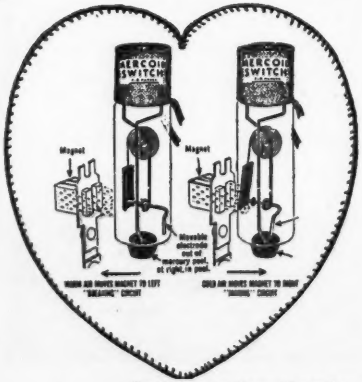
THERMOSTAT

BY

MERCOID





There is no mystery in the growing acceptance of the Mercoid Sensatherm. It can be accounted for in the recognition throughout the heating industry that here is a thermostat whose built-in qualities fit it for the field it serves. • The Sensatherm is of small mass. We build it that way to meet the requirements of sensitivity. Thus it responds quickly to the true room temperature changes. No artificial stimulant is necessary. Its own accuracy as a heating system pilot is a matter of record to everyone who is familiar with this outstanding instrument.

THE HEART OF THE SENSATHERM Beneath the cover is the Mercoid magnetic switch, an all important and exclusive feature found in no other room thermostat. The circuit is made and broken within a hermetically sealed glass tube—see illustration. The operation is not affected by dust, dirt or corrosion—common causes for heating discomfort and service calls.

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NINTH ANNUAL CONVENTION

of the

EDISON ELECTRIC INSTITUTE

June 2, 3, 4 and 5, 1941

BUFFALO, NEW YORK

Registration: Monday, June 2nd, 9:30 A. M., Hotel Statler. Tuesday, June 3rd, Wednesday, June 4th and Thursday, June 5th, 8:30 A. M., Kleinhans Music Hall.

Schedule of Events

GENERAL SESSIONS

Kleinhans Music Hall

Tuesday morning, June 3rd, 9:30
Tuesday afternoon, June 3rd, 2:00
Wednesday morning, June 4th, 10:00
Thursday morning, June 5th, 9:45

SOCIAL EVENTS

Dancing

Terrace Room—Statler Hotel
Monday evening, June 2nd, 9:00

Informal Gathering of all Delegates
Terrace Room—Statler Hotel
Tuesday afternoon, June 3rd, 4-7

Concert

Kleinhans Music Hall
Tuesday evening, June 3rd, 9:15

Bus Trip

Visit to Niagara Falls and Tea at Niagara Falls Country Club
Wednesday afternoon, June 3rd, 2:30

Luncheon-Meeting

Ballroom—Statler Hotel
Thursday, June 5, 1:00 P. M.

Jewels for your cash registers!

UTILITY, not ornamentation, demands sapphires for the practically frictionless bearings of Westinghouse watthour meters. Annually, 2,000,000 jewels are used to assure accurate measurement. Further evidence of painstaking refinements are the tiny watchwheel shafts, and wire so fine that 1,562,000 strands can be packed into a single square inch. Such accuracy protects you against possible errors of undermeasurement or overmeasurement, which cause loss of income or loss of customer good will.

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WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, EAST PITTSBURGH, PENNA.

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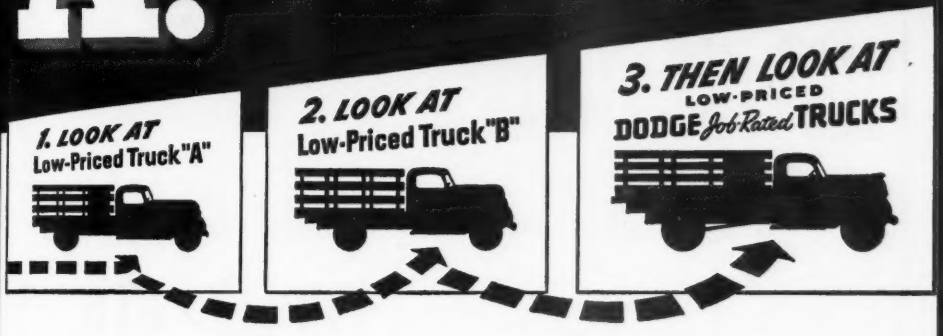
ELECTRICAL PARTNER OF THE CENTRAL STATION INDUSTRY

Q. How can I cut my hauling costs?

A. Look and Save! Buy the One-Two-Three Way...



COMPARE TRUCKS—Here's a suggestion that's as free as the air you breathe. And it can save you some money . . . maybe a *lot of money!*

Buy your trucks the one-two-three way! In other words, before you lay your money on the line for any truck, look at Dodge Job-Rated trucks.

COMPARE QUALITY—Check and compare all important truck units. Be sure they're the *right* quality and the *right* size in the truck you buy . . . built for the job . . . to stay on the job . . . to save you money!

They will be *right* in a Dodge Job-Rated truck . . . because that's what "Job-Rated" means . . . trucks *built to fit the job!*

When you pay for quality, *get quality* . . . Dodge quality . . . *built-to-last quality* . . . in design, materials and workmanship.

You don't have to pay extra money for such a truck, because Dodge Job-Rated trucks are priced with the lowest. See your Dodge dealer now for a "good deal."

DEPEND ON DODGE *Job-Rated TRUCKS

*Job-Rated MEANS A TRUCK THAT FITS YOUR JOB

Better BECAUSE OF CHRYSLER CORPORATION ENGINEERING

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Chassis .. $500 AND UP (WITH COWL)	Pick-Ups $630 AND UP
Chassis .. $595 AND UP (WITH CAB)	Panels .. $730 AND UP
	Stakes .. $740 AND UP

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DODGE DIVISION, CHRYSLER CORPORATION, DETROIT, MICH.

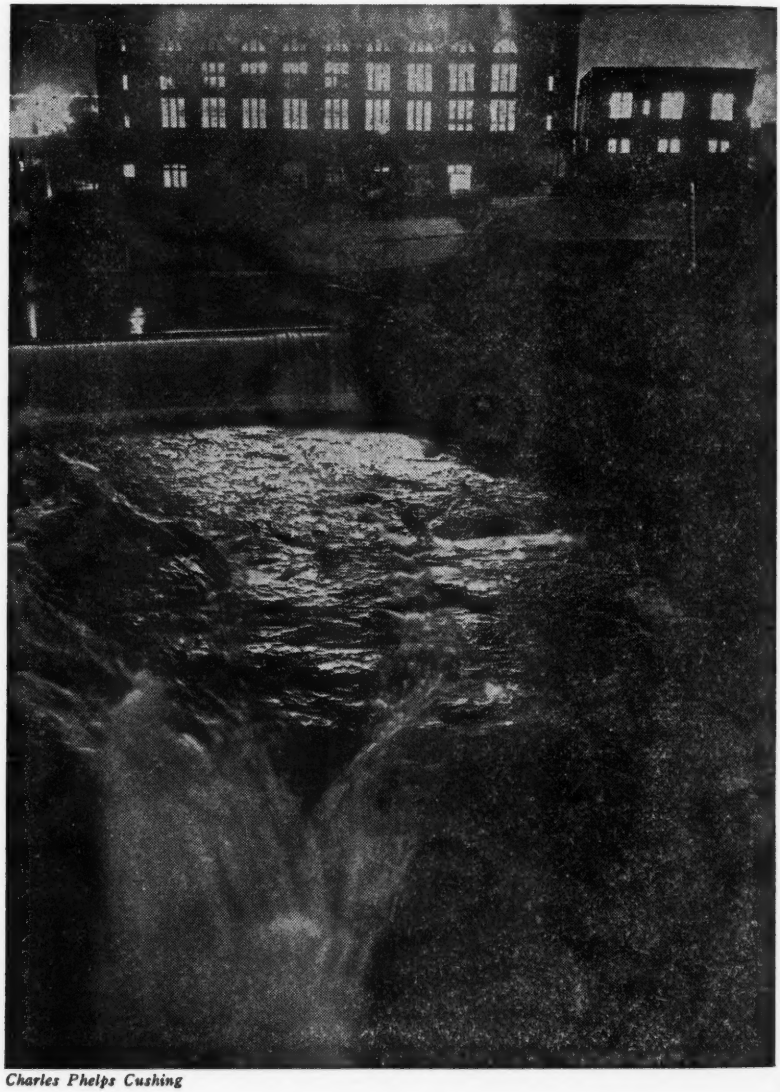
Utilities Almanack

MAY

22	Th	¶ *Missouri Valley Electric Association starts spring accounting conference, Kansas City, Mo., 1941.*
23	F	¶ *Empire State Gas & Electric Association, Electric Operating Group, convenes, Schenectady, N. Y., 1941.*
24	Sa	¶ *American Water Works Association, Montana Section, concludes meeting, Missoula, Mont., 1941.*
25	S	¶ *Canadian Transit Association will hold annual meeting, Montebello, Quebec, June 5, 6, 1941.*
26	M	¶ *Public Utilities Advertising Association starts annual convention, Boston, Mass., 1941.*
27	Tu	¶ *Pacific Coast Gas Association will hold Northwest conference, Portland, Or., June 9, 10, 1941.*
28	W	¶ *Illinois Telephone Association starts meeting, Peoria, Ill., 1941.*
29	Th	¶ *Conference of Mayors and Other Municipal Officials of the State of New York will hold meeting, Albany, N. Y., June 9–11, 1941.*
30	F	¶ *American Society of Mechanical Engineers, Oil and Gas Division, will hold convention, Kansas City., Mo., June 11–14, 1941.*
31	Sa	¶ *American Institute of Electrical Engineers will hold summer convention, Toronto, Can., June 16–20, 1941.*

JUNE

1	S	¶ *Society of Automotive Engineers starts national summer meeting, White Sulphur Springs, W. V., 1941.*
2	M	¶ *Edison Electric Institute starts annual convention, Buffalo, N. Y., 1941.*
3	Tu	¶ *Association of Gas Appliance and Equipment Manufacturers opens convention, Los Angeles, Cal., 1941.*
4	W	¶ *Wisconsin State Telephone Association starts convention, Madison, Wis., 1941.*



Charles Phelps Cushing

Downtown Hydro

Situated in the heart of the downtown section of Spokane, Washington, on the falls of the Spokane river

Public Utilities
FORTNIGHTLY

VOL. XXVII; No. 11 MAY 22, 1941

Public and Private Power In the Northwest

The author believes that a coöperative, coördinated program for the use of both services should be adopted. The electric utilities, he says, are ready, able, and anxious to be of the maximum service and are fully equipped to do their part adequately and quickly.

BY KINSEY M. ROBINSON

COMPLETION of the tremendous Grand Coulee and Bonneville power projects marks a new power era in the five great states of the Northwest. There still remains to be solved, however, the problem of transmission and distribution of power from these projects in such a manner as to bring its benefits immediately to the largest number of communities and consumers.

Only through a sincere program of coördination and coöperation between governmental agencies and the existing publicly and privately owned utilities can electricity from these giant Federal plants be brought to the ultimate consumer, in such a manner as to assure the greatest utilization of electricity, with the lowest cost and the highest standards of service. The utilities of the Northwest have repeatedly and publicly offered such coöperation, but nothing has been done about it by the government. Instead, its program has veered even further away from an ob-

jective solution to this major economic problem.

The private companies have many times publicly signified their willingness to coöperate with the Federal government in distributing Bonneville and Grand Coulee power the day it is available, passing all resulting savings along to their customers. As a matter of fact, that was the expectation of the people of the Northwest when these projects were begun. It also was the policy expressed by Mr. Roosevelt, in a public statement in Portland in September, 1932, when he said:

> State-owned or Federal-owned power sites can and should be properly developed by the government itself. When so developed, private capital should be given the first opportunity to transmit and distribute the power on the basis of the best service and the lowest rates to give a reasonable profit only.

There is room in the Northwest for *both* public and private power, with the huge, federally owned projects generating vast amounts of electricity and transmitting it over existing lines where they are adequate, or over newly built lines if necessary, leaving distribution of that power to private companies or public bodies already in existence. The government should not needlessly duplicate existing transmission facilities which are adequate to handle this Federal power.

FROM the standpoint of public policy and achieving the goal of encouraging "the widest possible use" of electricity, there should be an immediate coördination of those projects and the privately owned power facilities. It is certainly more important that residents and industries of the Pacific Northwest receive Bonneville-Grand Coulee electricity at the lowest possible rates *right now* than it is to withhold a large part of their possible power output until ultimate determination of whether this power shall be distributed through public or private agencies. And, likewise, it is important that industries be free to grow and to locate in *all* parts of the region; not merely beside Federal plant locations which are being developed by the moving of all new industries to these locations.

Why not use the facilities now available in the region, instead of waiting to build a superimposed, independent transmission system over the top of the transmission systems now in the territory, and leading to exactly the same load centers and the same markets now receiving service! The electric utilities know how to do the job and keep on doing it. Other organizations need not be sidetracked from defense projects to do this job.

One of the important resources of the Northwest is its large proportion of the nation's water power. There are more than 280 privately owned and operated generating stations, large and small, with installed capacity of some 2,250,000 kilowatts. This is in addition to public power projects, including Bonneville and Grand Coulee, whose capacities will be doubled by the end of this year. The capacity of the plants in this area always has been well above demands.

IN 1932, the Federal government assumed the responsibility for future generating facilities in the Northwest. The private utilities have not had the function of building any major new power plants since that time, anticipating purchase and distribution of energy from those government projects.

The private utilities are not opposing installation of additional generating facilities at Bonneville and Grand Coulee. We favor, too, early appropriations for reclamation by Congress, thus giving a farm crop diversification in the Columbia basin not possible previously.

Throughout the five Northwest states from the Pacific coast to eastern Montana and Utah, from the Canadian border to northern California, stretches an interconnected network of privately owned power transmission systems which has enabled the electric industry to meet every demand or every emergency.

This integration of power facilities began back in 1908. That far back, the private utilities began their program of creating transmission systems. Some of the first such systems in the country were in the Northwest, which also saw the earliest developments of hydroelectric power. Since the time of the last World War, these interconnected systems have grown in mileage and scope, and have expanded through the years in advance of the growth of the country.

Through all the years, the Northwest maintained a position of leadership in this development, through the initiative of private enterprise.

PRIOR to 1933, the Federal government had not built any high-tension transmission lines. Neither have municipally owned systems contributed substantially to this interconnection, which takes advantage of varying load requirements of agricultural areas, mining regions, industrial centers, and cities and towns. Through this system, these uses are "leveled out" and the various companies get a greater use of their facilities. This has contributed substantially to the low electric rates that have always existed in this area.

The operation of this great Pacific Northwest electric transmission grid can be coördinated with Bonneville and Grand Coulee to bring the benefits of these projects to *all* the people, more quickly, and at less expense to the nation, than by any other means!

There is absolutely no need for government destruction of privately owned companies and the resultant loss of more than $17,000,000 annually in taxes. Coöperation will greatly reduce the amount of money needed for transmission facilities, and technically trained men and vital construction materials can be released to support the nation's defense program. Government money can and should be used for production of planes and ships, bar-

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racks and bombs, guns and essential defense supplies which necessarily must be financed by government.

By concentrating government spending and energy—its men, money, and materials—on the nation's Number One problem of national defense, a greater degree of protection will be furnished for our country.

THESE are times that call for the closest coöperation between government and business, and the utility industry is giving and will continue to give that coöperation. Industry's part in this new national unity must be to offer itself promptly and without reservation to the national service. Government's contribution could well be to turn from an attitude of dislike and distrust of business and a policy of drastic and detailed direction of the nation's industrial life, to new methods of coöperation and coördination. Waste of money, men, or energy should not be tolerated.

Rather than have power from Bonneville and Grand Coulee used to take away the present business of the private companies, creating the economic waste of idle power plants and dead transmission lines, this power can and should be used for the real purpose of these projects—to get the fullest use of electricity over the greatest possible area of the Northwest, to reduce the cost of service to present users of electricity, and to help develop new industries and new payrolls for the region.

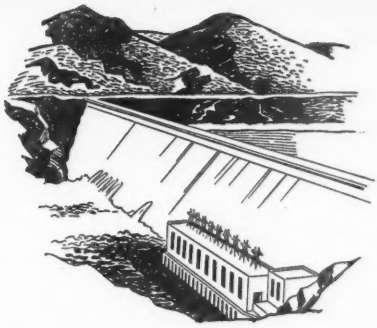
Coördinating the public plants and the private systems is simple. There is no real reason why they should not be so operated, coöperatively, for the benefit of all. In the Northwest are these two huge tax-free Federal power projects which soon will have tremendous blocks of power for sale. And here are twelve large privately owned power systems with property valued at more than $660,000,000, 280 or more power plants, 16,000 miles of transmission lines, nearly 13,000 employees, and an annual payroll of some $24,000,000. These companies have expended more than $72,000,000 for new construction in the last five years.

ON the basis of sound economics, the practical solution to coördination is a pooling of power from the government generating projects with power from the existing systems, keeping the 280 plants in operation, thus utilizing to the greatest extent the water storage facilities of these systems. This will not only prevent waste and destruction of investment but also will materially increase the "firm"—or full-time—output of the combined systems.

Such a program would obviate needless expansion of government facilities and would require only a fundamental "backbone" transmission grid to carry power into major load centers. From these load centers, the existing privately owned interconnected transmission systems are well developed, and they can transfer substantial amounts of power to make up any deficiencies which might arise in other parts of the interconnected systems. There is no need for using dollars obtained through taxes to build expensive duplicating Federal transmission lines.

This program would permit private companies to continue their original useful purpose, instead of destroying them *for no constructive reason.*

Had the government not assumed the job of building generating facilities



Water Power in the Northwest

"ONE of the important resources of the Northwest is its large proportion of the nation's water power. There are more than 280 privately owned and operated generating stations, large and small, with installed capacity of some 2,250,000 kilowatts. This is in addition to public power projects, including Bonneville and Grand Coulee, whose capacities will be doubled by the end of this year. The capacity of the plants in this area always has been well above demands."

in the Northwest, the private companies would have continued to build in preparation for the future as they have done in the past. The private utility industry *always* has maintained reserve transmission facilities throughout the Northwest to meet the future needs of the various parts of the territory.

THE groups most concerned in the program of bringing electricity to consumers of all kinds at the lowest possible cost are the Federal government, which built Bonneville and Grand Coulee; the publicly owned systems such as Seattle, Tacoma, Eugene and others, and a few small operating public utility districts; the regulatory commissions of the various states; the privately owned utilities now on the job; and prospective additional large industrial customers buying power direct from Bonneville-Grand Coulee. Then, too, there are the groups interested in the specialized problems of irrigation and rural electrification and, finally, the homes, stores, shops, et cetera, all over the region.

It is my suggestion that this whole matter of power supply, including rates and methods of distribution, be studied immediately by an impartial, fact-finding committee guided only by rules of sound public policy—not by partisanship on the question of *public versus private* ownership. On this committee could well be representatives of the Federal government, state regulatory bodies, existing publicly owned systems, industry, labor, and the private power companies; in fair representation in each case, and with due regard

to "home rule" and to the importance of local needs, conditions, and ideas.

It must be recognized that a new power era is here. With this era has come a definite responsibility to the government and to the utility industry to present a definite plan through which benefit of these projects—built with the taxpayers' dollars—can be brought to the public as *soon* as possible and as *effectively* as possible.

CERTAINLY a Northwest fact-finding committee should conduct this kind of a review before any permanent legislation is considered by Congress. Legislation without proper consideration could prove to be very detrimental to the best interests of the people who must continue to live in this area. These are the people, after all, who must pay back to the Federal government, with interest, the cost of that part of those tremendous projects which is allocated to power.

The people of the Northwest are by no means unanimous in their views on public ownership. That many will not have public ownership thrust upon them was demonstrated this March in Spokane, largest city in the Grand Coulee area, which decisively rejected public owernship for the second time in four months; and last May, when citizens of Portland, largest city in the immediate vicinity of Bonneville, also rejected public ownership. These refusals of the principle of public ownership were not a rebuff to the government power projects. Instead, they meant Spokane and Portland felt Federal power should be distributed through existing facilities, provided reasonable rates were assured.

I hope that the bickering over *who* shall distribute the power can be ended. Such controversy never builds; it always tears down. The greatest benefits of coöperation cannot be measured. Coöperation and harmony, instead of duplication and discord in the power field, will advance prosperity and progress for the entire Northwest.

THERE is no doubt in my mind that rates of private companies will, within the next few years, approach the Federal "yardstick" rates for retail sale of Bonneville and Grand Coulee energy, with due allowance for the function the private companies perform in acting as collectors of taxes for local and other government bodies, over and above their actual cost of conducting their own power business. I am confident that, when the matter is approached objectively, consideration will be given to the taxes paid by both public and private utilities. My own company pays, in taxes, 21 cents out of every dollar it receives for electric service, and this item is a material factor in the price at which we must sell electric service. None of this tax money stays with the private companies. If the people want the private utilities to continue this function, it is important to realize that the money so collected is not for *power,* but for *government.*

The problem confronting the government generating plants and the private utilities is changing materially from day to day, because of the need for power for major national defense industries. This speeding up of national defense already has brought several major industries to the lines of both private and public systems in the Pacific Northwest, and undoubtedly more will follow.

However, these projects should not attempt to veil themselves with the cloak of national defense needs to obtain Federal funds for transmission lines which are not needed. America cannot afford to spend its money on things that are not necessary to its defense; it cannot afford to squander labor, copper, or machinery on duplicating and unnecessary items when the need is for an "all-out" program on airplanes, tanks, and guns. Bonneville and Grand Coulee were started long before there was any discussion of their importance to national defense, and only transmission lines now genuinely needed for preparedness should be built.

REVIEWING the points mentioned here: First, the private utility industry realizes construction of Bonneville and Grand Coulee marks a new power era here in the Northwest. It believes there is room for both private and public ownership, but it also feels the only way in which all of the people can get maximum benefit from these huge projects is through a program of coöperation and coördination. After all, the essence of coöperation is collective action for common benefit. Government is still paid for by the people, and its objective must be constructive—not punitive—to have their continued support.

As a means of attaining coöperation and coördination, I have suggested an impartial, fact-finding committee to study this whole question of power supply, and to make recommendations which might well be embodied into the governing law for solution of the power question in the Northwest. To my way of thinking, there is no reason why a working compromise cannot be reached, with public and private ownership both fulfilling useful purposes in the economic picture, provided both sides are willing to coöperate in a spirit of fair play.

It is to the definite disadvantage of *all* private enterprise that a complete transition be made from private ownership to public ownership of the utility industry here. Isn't it an advantage to the general public—to everyone—to have the private companies operate here in coördination with the government as a check against the *wholly* publicly owned areas such as the TVA? Then we can see and know which does the better job! A 5-year check period such as this should give conclusive evidence on which to form a decision as to whether it was wise to replace the private utilities.

THE electric utility business is just one phase of industry. If present attacks on it are successful—and this phase of private enterprise is elimi-

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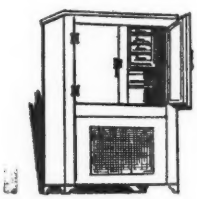
nated entirely through socialization of the power business in the Northwest —none can say what other industry will be next. We who believe in private enterprise are all in the same boat. It just happens that it is the public utility industry which is under fire now, and some in the government would take us over bag and baggage without any regard for the wishes of the people in the area most directly affected. The same perils and the same problems of Federal control are right at hand for all industry today.

The electric utilities are ready, able, and anxious to be of the maximum service. They are fully equipped with the necessary facilities and trained personnel to do their part adequately and quickly, in any program of peace or preparedness. If they are permitted to do this job—for which their record of the past proves them to be capable—large amounts of Federal funds can be released for necessary government expenditures.

We have the money. We have the man power. We have the accumulated experience of more than half a century behind us.

We have faith in the future of the great Northwest; and we have faith in the ability of our country to win through in this hour of greatest trial, provided a real "all-out" effort is concentrated on grave defense needs and not dissipated, as in France, on internal strife and dissension.

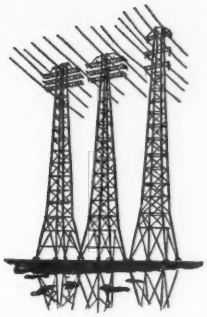


REA Refrigerator Deal Off

BECAUSE of difficulties encountered in coördinating its ordinary distribution practices with the plan arranged for distributing the proposed REA Co-op model electric refrigerators, the Stewart-Warner Corporation has withdrawn its offer to produce these new models for members of REA-financed coöperatives. In acknowledging the withdrawal, REA Chief Harry Slattery on May 6th observed that "the current refrigerator season is already well advanced."

While this precludes the distribution of the proposed REA Co-op model refrigerators at this time, REA will prosecute its new program of refrigerator financing by extending the procedures already proved successful in group-purchasing arrangements, especially in connection with the so-called "self-help" coöperatives. These procedures have resulted in farmers purchasing refrigerators and other electrical equipment on very favorable terms.

The REA refrigerator-financing program is based upon two principles: 1. That the REA lines open up a vast new market, which would not exist except for the government rural electrification program and which deserves and must have special mass-market treatment. 2. That REA has an obligation to use its influence to the advantage of the farmer-purchaser.



Bringing Power to the Farm

Article II — National Development

1924-1935; the CREA

In this article the author discusses the plan for the extension of rural service that was carried out, the Red Wing and other test projects, and the results achieved, including lower line construction costs.

By ROYDEN STEWART

When central station electric service was extended into farming districts (beginning about 1906) it was natural that both the electric companies and the farmers should concentrate at first on getting the distribution lines built. Once the magical energy had been brought to the farm, it was used for lighting and for farm work in which it could be easily substituted for other sources of power, such as pumping water for irrigation. But true farm electrification involved much more than stringing wires and belting electric motors to old farm machinery. G. C. Neff, chairman of the National Electric Light Association Rural Lines Committee in 1923, stated the problem as twofold.[1]

(a) How service can be supplied to the farmer and what is involved in its establishment;

(b) How service can be utilized by the farmer so that it will be profitable to him.

In industry the advent of the electric motor had led to the development of an almost entirely new line of factory machines and the devising of new production methods to take the greatest possible advantage of the use of electric energy. Essentially the same task had to be done in agriculture before the relation of seller and buyer could be made mutually profitable. Farm electrification, however, faced a major limitation (not yet overcome) which did not exist in industry: The use of electric power had not been made practicable in field work and hauling, which represented more than two-thirds of all farm power requirements.

[1] NELA Bulletin, March, 1923, p. 153.

For several reasons, most of them financial, the individual farmer was not able to contribute to this developmental work in the same way that many industrial customers had helped in the beginnings of industrial electrification. The research and experiment that were the necessary foundation for large-scale use of electricity on the farm were accomplished through coöperative effort by national farm organizations, equipment manufacturers, and electric utility companies, with the help of other interested bodies. The National Electric Light Association initiated this unique program late in 1922 when it invited the American Farm Bureau Federation to join in organizing a national committee to coördinate the activities of all the groups interested in farm electrification.

THE plan was put on a working basis in 1923 through the formation of the Committee on the Relation of Electricity to Agriculture. Of the committee's twelve members, three were officers of the Farm Bureau Federation, four represented the NELA, and one each came from the American Society of Agricultural Engineers, the manufacturers of farm electric plants, and the Departments of Agriculture, Commerce, and Interior.[2] J. W. Coverdale, of the Federation, was elected chairman and G. C. Neff, secretary. Later Dr. E. A. White was appointed salaried director.

The committee outlined four investigations to be carried on under its general supervision: (1) a farm power survey, (2) a survey of central station and isolated plant service to farmers, (3) a survey of agricultural uses in foreign countries, and (4) experimental and research work on the uses of electricity on the farm.

The survey of service was made by the NELA. The first national count of "electrified" farms[3] recorded a total of 177,561 farms receiving service from central station electric companies on December 31, 1923. This was 2.8 per cent of the 6,371,640 farms in the United States, as reported by the 1924 Census of Agriculture.

In each of seven states, the survey showed, more than 10 per cent of the farms had "high-line" service from electric utility companies. (Table I.) The first four of these were far western (Pacific and Mountain regions) states, showing that irrigation pumping still provided the most important basic demand; the other three were New England states, where line extensions were favored by density of population in rural areas, including many industrial and nonfarm residential consumers, and where rural service had been aggressively promoted by many utility companies. The four states ranking next also were New England and far western. In all the rest of the country, only three states had more than 5 per cent of their farms connected to utility lines. Eighteen states had less than one per cent—almost no rural service; of these, eleven were in the South Atlantic, East South Central, and West South Central groups—in general, the regions where farms were

[2] Groups which joined later included American Home Economics Association, National Grange, General Federation of Women's Clubs, National Association of Farm Equipment Manufacturers, and National Electrical Manufacturers Association.

[3] In 1919 the Bureau of Public Roads of the Department of Agriculture made an estimate placing the number at 100,000.

most scattered, per-farm income was lowest, and little or no irrigation was used.

TABLE I

STATES IN WHICH MORE THAN 5 PER CENT OF FARMS HAD CENTRAL STATION ELECTRIC SERVICE ON DECEMBER 31, 1923

State	*Per Cent of Farms*
California	23.5
Washington	18.3
Utah	12.9
Idaho	12.5
New Hampshire	11.4
Maine	11.3
Connecticut	11.3
Rhode Island	10.2
Oregon	9.4
Vermont	8.6
Massachusetts	7.3
Ohio	6.9
Pennsylvania	6.5
Iowa	5.3

THE power survey was conducted by the Department of Agriculture, which reported the findings in its Bulletin 1348, February, 1926.

According to the survey, United States farms had available a total of 47,420,000 horsepower of primary power, other than man power, and were utilizing 16,000,000,000 horsepower-hours a year. Of this, 11,300,000,000 were required for draft work (hauling and field work), leaving 4,700,000,000 for stationary work, in which electric power might conceivably be used. Central station electric power was supplying 750,000,000 horsepower-hours, or 16 per cent of the total employed in stationary work; another 150,000,000—3.2 per cent—was obtained from 300,000 individual electric plants.

The total annual cost of power for both draft and stationary work was reported as $3,000,000,000, of which $53,000,000 was for central station electric service and $38,000,000 for power from individual electric plants. From these estimates, it could be computed that the average cost of central station electric power to the farmer was 7.07 cents a horsepower-hour, or about 9.17 cents a kilowatt hour; where individual plants were used, the cost was 25 cents a horsepower-hour, 32.89 cents a kilowatt hour. Power from large stationary engines cost 4 cents a horsepower-hour, from small stationary engines 8 cents; but utilization from small engines was three times that from large, so that all stationary-engine power cost an average of 7 cents a horsepower-hour, about the same as central station electric power. These tabulations took no account of lighting and household tasks, which, though their requirements were small, represented almost the only potential uses of electricity on a great number of farms.

SUCH was the uneven picture that farm electrification presented in

¶ *"IN the Pacific Northwest a survey of rural systems made in 1931 showed the most usual type of line then in operation as single-phase, 6,600-volt, using No. 6 bare hard-drawn copper for conductors, at costs ranging from $600 to $800 a mile. These were durable, reliable lines on which maintenance costs were reasonable, not to be classed with the merely cheap lines of some of the pioneer experiments."*

1924, when the CREA began its work. The committee mapped and carried out a far-reaching, unprecedented program of research, experiment, and education.

The national CREA, which had offices in Chicago, was the central coördinating agency. Under its leadership, 27 state committees were established to initiate and help finance (mainly from funds contributed by electric light and power companies) the actual work of research and experiment. Most of the laboratory tests were carried out by state schools of agriculture at their experiment stations. Every known use of electricity on the farm was carefully reëxamined and many new uses were developed; exhaustive tests of applicability were made and comparative cost data were assembled. The results were reported to the national committee, which accumulated and published them in a series of bulletins and news letters.

The experiments were not allowed to end in laboratory records, however. Application of the research findings in actual farming was an integral part of the program from the beginning. In each of seven states a rural distribution line serving a typical farming community was selected or built as a test project. The state CREA's, utility companies, agricultural schools, equipment manufacturers, and farmers collaborated to establish these test projects and operate them under controlled conditions. The records of the test projects and the other experiments conducted under CREA sponsorship by agricultural engineers are still the most complete and dependable body of data on the use of electric power on the farm.

THE first state project, and probably the best known, was the one established by the Minnesota CREA in the Burnside community near the town of Red Wing. The distribution line, 6.3 miles long, was built by the Northern States Power Company to serve nineteen prospective rural consumers, of which sixteen eventually were connected, and began service in December, 1923. Distribution was at 2,300 volts, single phase, using iron messenger wire. Later, the iron wire having given the usual trouble of excessive voltage drop, all-copper construction was substituted, and in 1926 the voltage was increased to 6,900. The rebuilding brought the total cost of the line, including transformers, arresters, etc., to $11,154.12 or $1,770 a mile.[4] This would have justified a monthly fixed charge of $9.54 for each consumer, but the original estimate of $6.90 was adhered to in actual billing. Energy used was charged for at the rate of 5 cents a kilowatt hour for the first 30 kilowatt hours used each month, 3 cents a kilowatt hour for all excess.

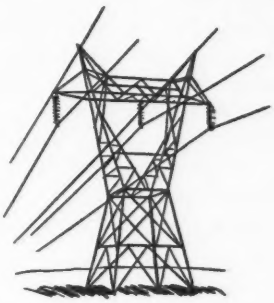
Seventy-nine manufacturers of electrical and farm equipment coöperated with the farmers (eight of whom took part in the controlled tests), the utility company, the CREA, and the University of Minnesota, in financing the tests. To June 1, 1928, a total of $75,158 had been expended on the project, including equipment worth $21,632 lent by the manufacturers, $9,374 contributed by the university, and $17,500 by the CREA.

THE Red Wing test was concluded in 1929. In addition to the care-

[4] *The Red Wing Project on Utilization of Electricity in Agriculture.* Univ. of Minn., 1931.

Development of Rural Electrification

"PRESIDENT Roosevelt created the Rural Electrification Administration in May, 1935, but no lines financed by REA were in actual service by the end of the year, so that the government activity was first reflected in industry statistics in 1936. Thenceforward the development of rural electrification in the United States took on entirely new characteristics. The nearly 600,000 farms connected to central station lines during the years 1924-1935, inclusive, were only one measure of the progress rural electrification made in this period."



fully collated records of individual applications, complete operating data for five of the farms were reported for the years 1924-27, inclusive, and from these the project directors were able to draw certain fairly definite conclusions as to the economics of "total" farm electrification under the conditions obtaining in one kind of farm community. After all adjustments, a consolidated statement of revenues and expenses of the five farms showed decided increase in both net cash income and net labor income (cash income, plus housing and food, less all depreciation and interest) for the three years following 1924. The increase in net labor income over 1924 was 45.7 per cent in 1925, 47.2 per cent in 1926, and 79.1 per cent in 1927. Operating expenses for 1927 were only one per cent greater than for 1924 (although taxes alone were 65 per cent higher) while revenues were 42.9 per cent greater. An undetermined part of these gains was due to a rise in the prices of farm products; but there could be no doubt that these five farmers had profited from the intelligent application of electric power, in addition to the incalculable gains in living conditions. And the operation of the project had contributed appreciably to the growing accumulation of proved data on the practicability and cost of farm power applications.

In 1927 the average monthly service bill on the Red Wing line (including the fixed charge) was $14.67.[5] The average monthly consumption of the customers participating in the project rose from 154 kilowatt hours in 1924 to 287 kilowatt hours in 1927; in the same period the average cost per kilowatt hour declined from 8.2 cents to 6.1 cents.[6]

IT should not be inferred that the Red Wing line was typical of CREA test projects. Each state committee was free to devise and operate

[5] *The Red Wing Project on Utilization of Electricity in Agriculture*, Univ. of Minn., 1931.

[6] Cf. average cost per kilowatt hour for all residential consumers in U. S. for 1924 was 7.2; for 1927, 6.8 cents. (Edison Electric Institute.)

its own tests according to its judgment and local conditions. Regional variations in farm economy, power production costs, and construction standards (according to local topography and weather) caused corresponding differences in construction costs, financing methods, rates, applications and usage, and, consequently, in over-all results.

On the Wisconsin test line, erected near Ripon in 1924, two canning companies were required to pay $650 each toward the cost of line construction, the contribution of an individual farm customer being set at $300. Rates were the same as Ripon city rates, plus a rural charge, initially fixed at $1 a month, to cover differences in transformer core losses and depreciation between urban and rural lines.[7] The financing plan and rate schedule used in the South Dakota test, at Renner, were similar to those in effect on the Red Wing line—possibly because the same utility, Northern States Power Company, supplied both communities. Local conditions and policies also governed the financing plans and rate schedules for the test projects at Garner, Iowa; Larned, Kansas; Marysville, Ohio, and Tolono, Illinois.

As a show window for the work of the state committees, the national CREA and the NELA in 1928 established the National Rural Electric Project at Sandy Spring, Maryland, not far from Washington. Five farms, selected as representatives of dairy, fruit, poultry, truck garden, and general farming, were connected to utility lines and equipped with electric appliances loaned by manufacturers. Charts and graphs, showing the achievements in farm electric applications, were displayed in the project office. In addition, the national project served Research Director George W. Kable and the University of Maryland as a laboratory for the working out of problems considered of national importance in farm electrification. The project was operated for five years, financing being supplied by the NELA and local utility companies.

THE CREA program was carried forward ably and energetically. In 1931 a partial survey revealed 211 investigations connected with, or stimulated by, the committee, 157 undertaken by utility companies and other commercial concerns, and many more by independent scientists and professional societies. The results of the investigations were made available to farm men and women all over the country through the CREA bulletins and news letters and hundreds of publications issued by the associated groups, and through educational activities conducted by the Department of Agriculture, colleges, women's clubs, farm organizations, and the rural service departments of utility companies. CREA Bulletin No. 1, Volume 1, listed 227 uses for electricity on the farm and 190 uses in rural industries. The NELA estimated in 1931 that 1,000 employees of light and power companies were devoting part or full time to extending electric service into rural districts and developing the load on existing lines. Many of these representatives were trained in the Rural Electric Short Courses given by the agricultural colleges with CREA coöperation.

[7] Following the formula recommended in 1921 by the Wisconsin Electrical Asso. See Part I, PUB. UTIL. FORT., May 8, 1941, p. 586.

The total cost of the work cannot be determined accurately. The NELA and its successor (in 1933), the Edison Electric Institute, advanced altogether $400,000 and the individual companies about $1,000,000. Universities and agricultural schools contributed the services of their experts and the use of laboratory facilities; 226 manufacturers lent equipment for experiments and tests; and, until 1935, the Federal government coöperated. The CREA continued its activities until 1939, but it ceased to be the most prominent agency in the rural electrification movement in 1935, when the Federal REA was established.

BOTH of the basic problems with which the committee concerned itself, namely, the profitable supply and use of farm electric power, had by 1935 been brought much nearer solution. The far-reaching research and experimental work done under CREA sponsorship had equipped agriculture, the electric industry, and the manufacturers of farm machinery with tools and facts without which the general application of electric power to farm operations would not have been possible. Much of this developmental work probably would have been done eventually in any case, but lacking the coördination and financing afforded through the CREA program, progress would have been much slower and comparatively haphazard.

The operation of the test projects, notably the Red Wing line, had shown that, on farms where the potential use of power for nondraft work was large, intelligent electrification could produce a dollars-and-cents profit as well as add greatly to human comfort. But these results were yardsticks for the possibilities of electricity on the farm only within certain rigid limits. The project farms were more or less typical of their particular districts, but they were not typical of American farms as a whole.

The Red Wing farmers, for example, ranked well above the national average in possessions and income at the start of the test, and they had more profit-making operations in which electric power could be used. Three of the five farms on which income records were cited used milking machines, and in 1927 one-third of the total income for the five came from the sale of dairy products, only a little over one-fourth from "crops and miscellaneous."

TABLE II

STATES IN WHICH MORE THAN 50 PER CENT OF FARMS WERE ELECTRIFIED ON DECEMBER 31, 1935

State	*Per Cent of Farms Electrified*	
	*Jan. 1, 1924**	*Dec. 31, 1935***
New Hampshire	11.4	68.3
Utah	12.9	61.0
Connecticut	11.3	61.0
New Jersey	3.4	60.5
California	23.5	59.8
Rhode Island	10.2	59.5
Massachusetts	7.3	57.4
Washington	18.3	57.1

*Based on 1924 Census of Agriculture.
**Based on 1930 Census of Agriculture.

FURTHER, these farmers had plenty of utilization equipment lent to them for the experiment—they did not have to buy it with cash on hand or normal borrowing power. The value of equipment installed on the five farms was $16,668, an average of $3,334 a farm, and wiring costs ranged from $265 to $431. A conservative estimate was, and is, that in order to make electrification pay its way, a farmer must invest in wiring and appliances at least twice as much as his proportionate share of line costs. Even if distribution lines were brought to their doors, the great majority of farmers—especially in the regions where the percentage of farms electrified was lowest—were in no position to approach the results achieved on the test projects.

The test projects and the laboratory work conducted by the CREA and associated agencies were only the nucleus of the advancement achieved in rural and farm electrification in the United States in the years 1924-1935, inclusive. Power companies in all sections were alert to their opportunities and obligations to serve the rural market. Every new rural line was in a sense an experiment; utility engineers and managers were constantly working to develop methods of rural construction that would give adequate and reliable service at lower cost, trying financing plans that would permit more farmers to become electric customers without jeopardizing the investment in rural and urban lines, and promoting increased farm consumption of energy. Many companies organized rural service departments; others added rural representatives to existing departments. Demonstrators traveled through rural districts, often with elaborate exhibits, and appliance sales campaigns were directed at the farm market by utilities, manufacturers, and dealers.

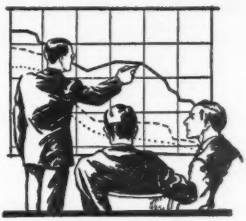
THESE aggressive efforts bore fruit in new thousands of farms connected to utility lines each year and—more significant for the future of rural electrification—in a steady increase in farm consumption of electric energy accompanied by a decline in cost to the farmer. The number of electrified farms rose from the 1923 count of 177,561 to 788,795[8] at the end of 1935. The total increase was 344 per cent in twelve years, at least four of which were bottom-depression years. From 1924 to 1930, inclusive, the growth was at the average rate of 38 per cent a year.

The 1935 total of electrified farms was 12.5 per cent of the 6,288,648 farms reported by the 1930 Census.[9] All regions had advanced, although the southern states in general still lagged behind the rest of the country; of the 16 states still having less than 5 per cent electrification (as compared to 34 states in this category twelve years earlier) 14 were in southern regions.

Electric consumption on farms in the nonirrigated areas rose almost steadily through the entire period, with little regard to the depression. In 1926, the first year for which farm consumption data were collected by the NELA, the average use on farms east of the 100th meridian, where little or no irri-

[8] EEI statistics.

[9] The 1934 Census of Agriculture reported 6,812,350 farms, but there are good reasons to believe that, through a confusion of definitions, this figure was too high by some hundreds of thousands. The 1940 Census report of 6,096,789 farms appears to bear out this assumption; otherwise the fluctuations between 1930 and 1940 would be unreasonable.



Variations in Rate Schedules

"THE rates schedules and financing plans in force in rural service in 1935 . . . expressed local conditions and therefore varied widely, but certain major trends had been noticeable for several years. The practice of requiring cash contributions to the initial line investment had virtually disappeared. In most cases the utilities now took all the risk, except for such protection as was afforded by contracts binding the farmer to guarantee amortization of the cost."

gation was involved, was 586 kilowatt hours. In 1935 it was 873 kilowatt hours, 49 per cent more.

DURING the same 10-year period the average cost per kilowatt hour for the same areas declined from 8.85 cents to 5.57 cents. Thus the average farm customer in these regions, who was spending $4.32 a month for electricity in 1926, nine years later was receiving 1½ times as much power and light for $4.05.

West of the 100th meridian, where irrigation pumping accounted for most of the load, consumption was from 7 to 10 times as great during this period, although the curve was not nearly so consistent; starting at 5,882 kilowatt hours a year, the average farm use rose to 7,804 in 1929, then declined to 5,673 in 1935—the fluctuation being due to rainfall conditions. Average cost in this region, where many farm customers qualified for commercial rates because of large consumption, was 2.05 cents a kilowatt hour in 1926, 1.78 cents in 1935.

These desirable changes in consumption and cost were good evidence that the CREA program, with its principal objective of increasing profitable farm use of electricity, had been sound both in conception and execution. As trends, they paralleled the history of electric service in towns by following the logical rule that increase in consumption tends to make fixed charges a smaller part of the total bill and thus reduce average cost.

THE difference was that fixed charges per customer were of necessity considerably higher on rural lines than in towns. But they were not, on any comparable basis, nearly so high as they had been in the pioneer period of rural electrification, so that reduc-

tion in construction costs also had been a factor in lowering the final cost of electric power to the farmer. Rural service naturally benefited from the great technological progress made by the electric utilities during the twenties and early thirties in generation, transmission, and distribution generally, with interconnection playing an important rôle. In addition, there had been special emphasis on developing lower-cost rural lines and service equipment.

Experiments in this direction had been numerous before 1924, but the experience with such expedients as iron wire, makeshift poles, etc.—so-called "fence-post lines"—used to bring costs as low as $150 a mile, was uniformly unsatisfactory, and few or no lines of this type were in service as late as 1930. Many companies, however, developed new rural-type construction designs which met service requirements and prevailing weather conditions while reducing total costs 25 to 50 per cent from urban averages. The Overhead Systems Committee of the NELA published in 1929 a comprehensive report, *Recommended Practices for Design and Construction of Rural Lines,*[10] based on the then current practices of companies serving rural territories and the requirements of the Bureau of Standards. Longer spans and various details of design which helped decrease over-all cost were emphasized. The use of less expensive materials was discussed, but this caution was added: "It should be borne in mind that the use of higher-grade material results in longer life in general, while the use of the cheaper grade of material means shorter life and higher maintenance costs. The various factors should be evaluated and an economic balance reached in determining the grade of construction for rural lines in any particular instance."

In the Pacific Northwest a survey of rural systems made in 1931[11] showed the most usual type of line then in operation as single-phase, 6,600-volt, using No. 6 bare hard-drawn copper for conductors, at costs ranging from $600 to $800 a mile. These were durable, reliable lines on which maintenance costs were reasonable, not to be classed with the merely cheap lines of some of the pioneer experiments.

SPAN lengths on the Northwest lines were reported as averaging 275 feet, but still newer practices employed much longer spans as a principal means of reducing costs. A standard span of 450 feet was a feature of the specifications for a type of line that Puget Sound Power & Light Company was building in thinly settled areas of the same region at a total cost of little more than $500 a mile.[12] Class C poles of western red cedar, their bases treated with preservative, were used, and further important savings were made by the introduction of labor-saving machinery and "streamlined" construction methods. The poles, purchased from farmers and timber men in the vicinity, were set quickly by a 3-man crew operating a truck equipped with hole-boring and pole-setting machinery; a light line crew followed, stringing wires. Volume of work was

[10] NELA Publication No. 289-16.

[11] By the Overhead Systems Committee of the Northwest Electric Light & Power Association.

[12] "Rural Lines for $500 per Mile," by M. T. Crawford, *Electrical World,* Oct. 17, 1931.

arranged so that crews lost little time between jobs.

Similar practices brought corresponding cost reductions in other regions, though the per-mile averages varied according to service and weather conditions and probably to some extent according to the accounting methods used in allocating costs. Construction of "substantial" lines in New York state during 1930 and 1931 was reported at $900 to $1,200 a mile, as against previous averages of $1,800-$2,000.[13]

Progress had also been made in designing lower-cost service equipment for farm customers, though the possibilities in this respect were proportionately smaller. It was fairly easy to effect a considerable apparent saving by installing smaller transformers (an experiment that had been tried at least as early as 1915), but though this device had been used extensively in Europe, it was not popular in this country—the American farmer did not want his use of electricity arbitrarily limited.

THE rate schedules and financing plans in force in rural service in 1935 also expressed local conditions and therefore varied widely, but certain major trends had been noticeable for several years. The practice of requiring cash contributions to the initial line investment had virtually disappeared. In most cases the utilities now took all the risk, except for such protection as was afforded by contracts binding the farmer to guarantee amortization of the cost. This guaranty, representing 1½ to 2 per cent of the increment cost necessary to serve the customer, was usually paid monthly in the form of a minimum bill under a block rate schedule.

Most companies found that this type of rate tended to build load. Compared to the demand plans, often involving multimeter service, that had previously been tried, the minimum-bill block rate, providing in most cases a lower charge to the small user, had the important virtue of simplicity and made the advantage of larger use obvious to the customer.

BUT so long as sound economic principles governed, there was a limit to the reduction of physical costs and the liberalization of financing plans. Outside that limit were still millions of farmers who were unable to

[13] "Selling Farmers Electricity on Community Basis," by Maurice C. Burritt, *Electrical World*, Oct. 17, 1931.

TABLE III

FARM ELECTRIFICATION BY REGIONS

Region	*Per Cent of Farms Electrified*	
	Jan. 1, 1924	*Dec. 31, 1935*
Pacific	20.3	53.8
New England	10.1	47.9
Middle Atlantic	7.1	34.8
Mountain	4.6	20.9
East North Central	3.1	20.6
West North Central	1.8	8.5
South Atlantic	0.6	5.7
East South Central	0.6	3.2
West South Central	0.4	2.3

meet their proportionate share of the cost of electrifying farm districts. Many of these, furthermore, conducted such simple farming operations that their potential use of electricity would never attain the minimum necessary to justify the extension of service to them.

This great deterrent was overcome in some cases by what was known as the area plan, first put into operation by some companies about 1931.

The central concept of the area plan was the electrification of fairly large rural areas as units, in much the same way that towns are electrified. Besides the inherent reduction in construction costs claimed by its advocates, the great advantage claimed for the area plan was that it permitted both construction and rate fixing on a community basis, making unnecessary the strict allocation of costs that otherwise operated to bar the small user. This was logical to the extent that the area to be served approximated a community in its potential consumption of electricity — *i. e.*, included an actual small community of comparatively dense population, a group of large-use farms, or an industrial plant to provide a nucleus of load. Such conditions, however, were rarest in the very farming sections that were still unserved. And there was the danger that, by rigidly separating rural districts from towns in disregard of population growth patterns, the area plan might permanently deprive the rural districts of rate reductions made possible by urban advancement. Nevertheless, the area plan was hailed by enthusiasts as the panacea for which complete rural electrification had been waiting, and it was eventually made a tenet of the REA program.

DESPITE all these very real achievements since the establishment of the CREA in 1923, the nation-wide progress of rural electrification was not nearly so rapid as had been hoped. The farmer's lack of purchasing power remained the chief obstacle. American agriculture had entered the financial doldrums in 1920 and was just beginning to emerge when the general economic storm struck the whole nation in 1930. Farm income dropped rapidly for three years. In 1935, including Federal benefit payments of $498,000,000, the national total was little more than half what it was in 1919. Under such conditions most farmers could not undertake to pay for electric lines even over a 10-year period.

Some farm leaders saw the solution in still longer-term financing, with the funds and credit to be supplied by the Federal government. Long-range public works was already an established national policy, and political support for the sponsorship of rural electrification on a similar basis was not hard to find. President Roosevelt created the Rural Electrification Administration in May, 1935, but no lines financed by REA were in actual service by the end of the year, so that the government activity was first reflected in industry statistics in 1936. Thenceforward the development of rural electrification in the United States took on entirely new characteristics.

THE nearly 600,000 farms connected to central station lines during the years 1924-1935, inclusive, were only one measure of the progress rural electrification made in this period. Of more fundamental importance were the accomplishments in developing farm

electric applications and gaining their acceptance by farmers, and in making electric service more easily accessible to rural areas through the multiplication of generating plants and primary lines, and the development of low-cost reliable rural lines. This broadening of the rural service foundation was indispensable to further large-scale expansion under any plan.

AUTHOR'S NOTE.—For purposes of simplicity, the distinction between rural electrification and farm electrification has not been emphasized in this account. The development of farm electric use was the most important phase of the work of the CREA, but in planning the electrification of any rural area the character of all possible users must be considered. In the eastern regions of the United States the ratio generally is one farmer to four or five nonfarm rural residents, but with five to ten customers to a mile of road. In the South and West the reverse is usually true: two to three customers to the mile, all of them farmers in varying degree. Since the electricity consumption of nonfarm homes is limited to domestic uses, many eastern utilities show a relatively low investment per rural customer, but are restricted in load-building, while the cost of establishing service remains the larger obstacle in strictly agricultural areas. Rural industries, such as factories, sawmills, creameries, etc., also are important where they occur, but they are neither numerous nor large in the usual farming district.

The third article in this series will appear in an early issue.

Public and Private Spheres in the Power Business

"THE *development of multipurpose water systems is economical and practical only if the power can be sold to pay a part of the cost. This is in itself a sufficient justification for the principle that the main field of private power companies is in the fuel-burning regions, and the main field of large-scale public developments is in the limited areas where water is the chief source of power.*

"But these considerations are not the main issue today. Let me summarize the issue as it is drawn between the government and private financial interests. FIRST—*Making and selling electricity is a legitimate business that no one wants to attack or to harm.* SECOND—*Making and selling power company securities is a legitimate occupation in itself, but when the holding company captures control over operating business corporations, and forces them into monopolistic practices, the public interest is injured."*

—HENRY A. WALLACE,
Vice President.

Santee-Cooper Dons Khaki

The South Carolina project now an important adjunct to national defense

By T. N. SANDIFER

THE South Carolina Public Service Authority, as this is written in early March, is pushing through the final legal arrangements necessary before it can take over the properties of the South Carolina Utilities Company, a step which for the first time will put this state public administrative group in the electrical utility business, paving the way for extension of this activity over most of South Carolina as a part of the famous Santee-Cooper power project.

Details of this remarkable engineering and political enterprise were pungently set forth by Herbert Corey in his report on "Uncle Sam in a Swamp," which appeared in the November 7, 1940, issue of this publication.[1]

If Mr. Corey was somewhat exercised at the time, the present writer, as a taxpayer and property holder of the state, was prepared to be, perhaps, less detached than his preceding observer at the scene. However, the picture has changed, even during the brief time elapse since Mr. Corey's study.

Crossing the mile-long causeway over what had been a cypress swamp watered by the Santee, this writer hoped the car in which he rode would encounter no convoys of Army trucks, antiaircraft batteries on the march, troops afoot, or in "jeeps" or other of the new defense vehicles. The possibility was very present in his mind because these are what the traveler most frequently encounters down in that sector. In fact, exploring what appeared to be a new side road near Charleston, he turned up a potential Army munitions storage depot, hidden as thoroughly as a moonshiner's still, but twice as well protected from unwelcome visitors.

In short, like the countryside around it, the Santee-Cooper project is now an important adjunct to the national defense. It may have been conceived back in 1926, when the current su-

[1] Vol. XXVI, p. 647.

preme issue of the country was not even imaginable, but, like other developments in state and national history, the transformation has taken place rapidly, and before the eyes. In this light, the state power program, federally financed, loses some of its earlier aspect, if only for the present.

EXAMINING the plan in this status, one finds that Santee-Cooper assumed its new rôle officially in early February, when William S. Knudsen, director of the Office of Production Management in charge of national defense, called for the earliest possible completion of the program.

Writing to John M. Carmody, administrator of the Federal Works Agency, from which Santee-Cooper derives financial support, Mr. Knudsen explained that the new accretion of hydroelectric power in that area is now needed by three large concerns, presumably engaged in national defense activities, and which he listed as the Aluminum Company of America, the Commonwealth & Southern, and an unnamed "Pittsburgh concern."

It would seem unnecessary to state that Mr. Carmody promptly pledges "full speed ahead" now that this program, which had apparently got under way originally without any definite terminal in sight, is a full-fledged part of the country's protective machinery.

He declared that all possible acceleration would take place; that the PWA and WPA, as well as other alphabetically designated units of his general agency, would "coöperate to the fullest extent with the South Carolina Public Service Authority."

"Work is being pushed forward on all fronts," he reported, "and, although the project is only half completed, it is expected that the initial delivery of power can be made by October 15th, barring unusual floods on the Santee river."

THE Federal Power Commission had spurred activity in the Santee sector also, by a declaration that its studies of available power there had indicated there would be a shortage of power in the area. This Federal agency, in its periodic reports of power requirements in various parts of the United States, and estimated available power, noted in South Carolina for instance, a peak demand in October, 1940, of 1,010,746 kilowatts, compared with an available generating capacity of 1,541,088 kilowatts. By December these figures were 998,014 kilowatts peak demand, and an available generating capacity of 1,171,830 kilowatts, all figures inclusive of fuel and hydro resources, and covering the whole state and not the Santee area alone.

The various government bodies concerned with the program became convinced after studying the matter, however, that they already were moving as fast as practicable, with regard to costs or other factors; so that while the actual completion date probably would not be affected, it might be possible to advance the time of preliminary generation of power from the scheduled date of December 31, 1941, to October 15, 1941.

At the latter time it is expected that two 40,000-horsepower turbines will be ready for production. Actual capacity output, according to present schedules, will be attained by March 1, 1942, and is calculated at 700,000,000

Available Power in South Carolina

"THIS Federal agency [Federal Power Commission], in its periodic reports of power requirements in various parts of the United States, and estimated available power, noted in South Carolina, for instance, a peak demand in October, 1940, of 1,010,746 kilowatts, compared with an available generating capacity of 1,541,-088 kilowatts. By December these figures were 998,014 kilowatts peak demand, and an available generating capacity of 1,171,830 kilowatts, all figures inclusive of fuel and hydro resources, and covering the whole state and not the Santee area alone."

kilowatt hours of energy per year of average stream flow.

THIS suggests a question as to whether the present national emergency will, at that date, which is virtually a year hence, still demand such a power supply in a region that is normally more than half agricultural and rural.

There comes to recollection what this writer gave as a consensus of opinion at the outset of present military activities around Washington, that power from private facilities could meet the load.

The Federal Power Commission on March 1st, however, implies that there has been some bad guessing:

> In approximately half the power supply areas there is installed, or scheduled for operation this year, sufficient capacity to supply the anticipated demands for 1941. In other areas it appears that anticipated demands can be met by encroaching on reserves or by additional capacity made available through interconnections with systems in adjacent areas. In certain hydro areas the situation can be met if favorable stream flow prevails.

Pointing out, however, that "the demand for power is growing more rapidly than the utility systems expected," the commission cited nine areas characterized as "important war material" zones, where actual increased demands were 53 per cent higher than had been anticipated, and warned that "margins of error of this order in planning to meet power demands two years hence, when the expanding defense program will be pressing the country's generating capacity, would mean serious power shortages such as threatened the defense effort in 1918."

APPARENTLY, for the time at least, the Santee-Cooper power program is to appear in this light. In support of this view there can be cited the activity, which this writer has mentioned, of a military sort; and undoubtedly all these thousands of troops are living in camps, which must be lighted and serviced with power otherwise. Without putting the War Department to the question it is easy, from observation in the region, to calculate that camps at Columbia, South Carolina, around Charleston, and other points on the coast, and in the other parts of that state alone, may be holding several hundred thousands of men who, at home, pull a lightswitch whenever they feel like it.

On this ground the case is made for Santee-Cooper as a defense asset, disregarding that it was not projected in any such rôle. On opposition ground, as the redoubtable and independently Democratic *Charleston News and Courier* acidly commented, "all electric power companies may be national defenses, and so may be all Diesel engines, and by dressing them up as such we may have public ownership of all power companies, including Santee-Cooper . . ."

The editor would appear to be right in his forecast as to the outcome of the Santee-Cooper enterprise. As Mr. Corey observed in his report on the matter, this undertaking started with considerable misgivings on the part of various students of the matter, as to where the power was to be used, in a state already exporting a substantial amount of its private power output.

THE negotiations referred to at the beginning of this writing seem to supply the answer. The South Carolina Public Service Authority appears to be no longer a strictly local enterprise, but if present plans carry through, will be furnishing power to virtually all the industrially active parts of the state.

At present the northwestern portion of the state shares with neighboring North Carolina the facilities of the Duke Power Company; Commonwealth & Southern's lines extend into the western border and down that line to the southeast, below the Charleston area originally covered by Santee-Cooper's plans. A subsidiary of Associated Gas & Electric serves the central region around the capital, Columbia, and subsidiaries of other national corporations the remainder of the state.

Purchase of the subsidiaries now contemplated, and in actual negotiation, indicates plainly that Santee-Cooper would assume service in territories now covered by these private companies, in large part. Thus, successful acquisition of the Lexington Water Power Company, at Columbia, as contemplated, a subsidiary of Associated Gas & Electric, would give Santee-Cooper an outlet now serving at wholesale three utility companies supplying a very extensive part of the state and its communities.

A SECOND affiliate of the AG&E, also sought to be acquired by the South Carolina Authority, likewise supplies numerous local utilities and public as well as private concerns serving various communities of the state. The acquisition of these various local affiliated private service corporations is now under negotiation, and is the step referred to earlier which will

finally place the authority in operation under public ownership.

The details of this transition are not pertinent here, beyond pointing out again that successful culmination of the various deals would extend Santee-Cooper's range not alone to the Charleston zone, but back toward the central, northern-central, and western areas where most factories and industrial activities are located.

Which brings in a more remote aspect of the national defense rôle in which the project is now cast. Here, an inquirer finds himself on more local ground. Charleston, as well as the remainder of the lower coastal area of the state, and doubtless other sections of the state also, is humming with activity incident to war preparations.

This situation may continue indefinitely, but the question already in the minds of business men, large and small, in the section is, "What happens after this?"

THERE is a disposition to regard Santee-Cooper's possibilities as perhaps holding one or two of the inscrutable answers. This program's claim that it will furnish power at an extremely low rate holds promise of attracting, in the future, those additional enterprises which southern communities rightly view, in many instances, as essential complementary economic support.

IN fact, a fundamental of Santee-Cooper's announced objectives is "an integrated industrial and agricultural economy to be brought about by transmission and distribution of Santee-Cooper's low-priced power," and as predicted by its sponsors:

"From an industrial standpoint the low-cost power is expected to stimulate industrial growth and thereby take up much of the slack caused by unprofitable agriculture."

Bolstering such aims, the engineering department of the authority is charged with assisting in development of new enterprises, particularly those utilizing the state's natural resources—an activity in which chambers of commerce at Charleston, as well as in other cities expecting to be reached by the expanded program of Santee-Cooper, are participating with obvious enthusiasm.

Here then, is probably the basis of community support for the plan; and speculation as to the extent that such hopes will be realized is too concerned with the realities of the major problem already cited, of what is to come when the temporary spurt subsides, to worry too much about equally practical questions raised by skeptics, as to where the state is to get $25,000,000, double that amount, or other sums encompassed in the purchases under negotiation. Bond issues are contemplated, supplying the immediate answer.

"IT is of the utmost importance that all Americans should now thoroughly comprehend the elementary principles of free government which sometimes one is almost tempted to believe are being forgotten.

"Too many of our citizens today look upon the government as something outside of ourselves, as an agency which rules us instead of an agency through which we rule ourselves."

—JOSEPH C. O'MAHONEY,
U. S. Senator from Wyoming.

OUT OF THE MAIL BAG

REA Objectives

In your issue of March 13, 1941, you present a detailed story on our recent financial report. You also make what amounts to a challenge to us to declare how far rural electrification can go. We would like to make a couple of comments and, within the limits possible, accept your challenge.

First of all, we find it impossible to determine with any degree of accuracy the number of farms now receiving electric service, and the number still unserved. We have some estimates of our own, which must necessarily be based in large part on estimates of private groups. The Edison Electric Institute has certain figures, but I doubt that they would make any claims to exactness.

The uncertainty is largely a matter of definitions. Let me cite a few of the definitions responsible for the confusion:

1. Some utilities, in reporting, exclude from consideration rural dwellings having a total value of less than $500.
2. Others exclude from consideration farms of three acres (or some other number) or less.
3. Some utilities consider as served any farm within 1,000 feet of the highline, regardless of whether it is connected or not.
4. Some utilities report consumers on a meter rather than on a residential basis, and a farm with two meters due to the rate structure of the company becomes two farms served.
5. There is no fixed definition of a farm. The Census definition has been changed twice in the last ten years. A similar confusion exists among those attempting to estimate the number of farms served.

An excellent example of what this confusion does to the figures is the case of the state of Connecticut. There the Census reported that on April 1, 1930, there were 17,195 farms. NELA estimated that on December 31, 1930, 8,452 farms, or 49.2 per cent, had electric service.

A bulletin of the Edison Electric Institute dated February 27, 1941, gives the Census figure for the number of farms as of April 1, 1940, at 21,163 and estimates that 18,500, or 87.4 per cent of these had electric service.

These figures would seem to indicate a substantial increase in rural electrification, some increase in the number of farms, and a general conclusion that only 2,663 farms in Connecticut are without electric service today.

However, the Census as of January 1, 1935, reported 32,157 farms in Connecticut and as of December 31, 1934, the Edison Electric Institute estimated that 10,138, or 31.5 per cent, had electric service!

This will give you some idea of the reliability of the "official" figures. The estimates of the number of electrified farms do not seem to be very much out of line, but there are large changes in the apparent number of farms. The answer to this is that Census definitions changed while the utilities' definitions did not. Thus, any attempt to relate one figure to the other is untenable, since they are obviously not on the same base.

In the case of Connecticut, where the figures are small enough to be analyzed according to direct observation, it is a matter of common knowledge that there are far more than 2,663 farms without electric service in the state. At least, there are far more than that number of dwellings occupied and on property devoted at least in part to agricultural pursuits which are not connected to any highline.

Yet data published in the last statistical number of the *Electrical World* imply that there are not more than 1,000 farms, if that, without service. The Census of 1940 indicates that there are 448,887 dwelling units in Connecticut. The electrical industry reports that 446,760 dwelling units are served and that the number of occupied dwelling units is 446,717. Thus, only 2,127 dwelling units are without electric service and 2,170 dwelling units are unoccupied. In an urban state such as Connecticut, less than one-half of the unwired dwelling units would be in rural areas and, therefore, fewer than 1,000 farms are without electric service.

Thus, one good reason for our not attempting to compare the number of farms served by our borrowers and the number served by private power companies is lack of comparability. Our records indicate that as of December 31, 1940, REA-financed lines were serving about 550,000 farms; but we do not believe that subtracting this figure from the Edison Electric Institute's estimate of nearly 2,000,000 farms served will give the number served by private power companies. They may be serving more or less than that balance.

This leads up to your challenge that we de-

clare whether or not we "ever seriously intend to promote electrification of farms having dwellings of less value than $500." I think you will agree that a flat "yes" or "no" to that question would be silly.

First of all, the value of a farm dwelling is in no way an index to the net cash income of the occupants. In general, I believe it is true that dwellings tend to have a much lower value with relation to income in the South than in the North, but even this is misleading, since neither net nor gross income indicates the living standards of families. It is only an index of the living standards of groups when taken as an average.

Further, our policy differs so sharply from that of most private utilities that neither individual dwelling value nor individual income is any indication of the feasibility of service.

Our systems are developed on an area basis and our determination of feasibilty is on the base of the whole system rather than mile by mile. Thus, we may find it feasible to electrify an area which has a considerable number of low-income families within it.

Whether or not they get service is determined only by whether they can afford the monthly cost. Since REA systems do not make a per-foot or per-pole charge for connecting the farm buildings with the highline, the farmer's only capital outlay is his membership fee, usually $5, and his wiring cost.

Many farmers of very low income can afford to spend $2.50 per month for electricity. This is especially true because we emphasize those uses of electricity which reduce farm operating costs or increase farm income. In many cases electricity pays its own way or its cost is no greater than the amount paid for less desirable substitutes to perform the same service.

However, in many areas, especially in the South, after the lines have been built, we find that a number of the poorest farms simply do not have the available cash or income to contract for standard service. Since many such farms can be served at very low incremental costs and the systems can well afford to carry the business, we have developed various techniques which bring at least the minimum benefits of electricity to the poorest farmer. One plan known as the Limited Service Plan is based on a low capacity transformer, new and inexpensive lightning protectors and circuit breakers, underground cable to the house laid in a trench which the farmer himself digs and backfills, and a new inexpensive meter. This plan makes it possible to supply enough electricity for the operation of lights, a radio, and a few small appliances for about $1 a month.

New and simplified wiring plans installed in groups under contract make it possible for the farmer to wire his house with a capital outlay of $1 and monthly payments of 50 cents.

Thus, our index to the feasibility of service has nothing whatsoever to do with the value of the individual farm and the income of the individual farmer. If the area can support a utility system under the REA plan, and requests assistance, funds should be made available. But it is perfectly true that some areas will not today support rural electrification on the basis of present costs and income.

With an agricultural situation which is changing as rapidly as ours, no economist can possibly define these areas nor indicate how many farms lie within them. Some areas in the country are being taken out of production. Others, now arid, may, within a few years' time, be reclaimed through the building of dams and the introduction of soil conservation methods. The national defense program is having its effect on farm economy and will have a more profound effect in years to come.

We would like to answer your question. And, very frankly, we would like to know the answer ourselves, but that answer is bound up with such broad trends that no man can give it.

There is only one index that we have: The demands on our funds and the proportion of applications which we find feasible, and in these there is thus far no sign of abatement.

We have less than $5,000,000 remaining from this year's funds. Applications now pending total nearly $100,000,000. It is probable that $100,000,000 will be available for lending during fiscal 1942.

You may find this answer unsatisfactory, but I believe you will agree that it is the only one we or anyone else can give.

Thank you for your comments on our report. We hope future ones will be more informative as our system for collecting data is strengthened.

—KENDALL FOSS, *Chief, Information Division, Rural Electrification Administration.*

¶ "WHETHER *in war or in peace, the electric light and power industry's chief objective is to provide useful and efficient service. It is through the worth and merit of what is given in service that any industry can earn a large enough return upon capital to attract investors and permit management, through the wise use of resources, to maintain and expand facilities. In the field of electricity, management has an especially difficult task today because operating efficiencies are being offset by such uncontrollable factors as rising taxation and higher costs of materials and supplies.*"

—EDWARD L. SHEA,
President, North American Company.

Wire and Wireless Communication

FINANCIAL and operating data relating to common carriers and broadcast stations subject to the provisions of the Communications Act have been assembled in a single volume entitled "Statistics of the Communications Industry in the United States," which was recently placed on sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., at a price of 25 cents a copy.

These statistics, compiled by the accounting, statistical, and tariff department of the Federal Communications Commission from reports filed with the commission, are being presented in yearbook form for the first time. The initial volume covers the year ended December 31, 1939.

The publication includes summary data, individual company data, intercorporate relationships of telephone, telegraph, cable, and radiotelegraph carriers, and financial and operating data relative to standard broadcast stations and networks. Several of the more interesting graphic illustrations from this volume concerning the telephone industry are reproduced on pages 672 and 673.

The compilation replaces mimeographed material heretofore issued at intervals and is augmented by statistical tables formerly included in the commission's annual report to Congress.

* * * *

THE drastic "antimonopoly" report adopted by the FCC on May 2nd (Commissioners Craven and Case dissenting) promises to stir up more controversy on the air waves than the still sputtering differences between the broadcasters and the American Society of Composers, Authors, and Publishers over music rights. The FCC regulations, ostensibly designed to foster and strengthen network broadcasting by opening up the field to competition, were hailed by Chairman Fly as "a Magna Charta for American broadcasting stations." They were hailed by President Paley of Columbia Broadcasting System as a trick to reduce "the networks and stations of America to impotent vassals."

Early expressions of opinion on the commission's order came mostly from indignant broadcasting officials. Niles Trammell, president of the National Broadcasting Company, charged that the new regulations were "a definite step towards complete government control of radio," and that "chaos, not further competition, would result from the blow aimed at the American system of broadcasting."

Samuel R. Rosenbaum, president of Station WFIL of Philadelphia, said:

> Separation of the Blue network from the NBC seems a drastic punishment of its affiliated stations for the service they have rendered the public. It might be justified if the public receives compensating advantages. The public interest is paramount and no private interest can stand in its way.
>
> However, the report of the commission's order sounds as if its effect would be to break down not only the Blue network but the entire structure of American network broadcasting as we know it.

Mark Ethridge, appointed by Presi-

dent Roosevelt to study concentration and control of broadcasting, went to see the President with regard to the order. A former president of the broadcasters' association, Mr. Ethridge's attitude was presumed to be critical of the commission's order. However, it was expected that his position would be clarified at the annual convention of the National Association of Broadcasters which opened in St. Louis on May 12th.

THE Women's National Radio Committee, representing more than twenty women's groups, criticized the commission's action as "undemocratic, un-American, and an infringement of liberty at a time of crisis when the preservation of free speech, press, and radio is essential to the continuance of democratic institutions."

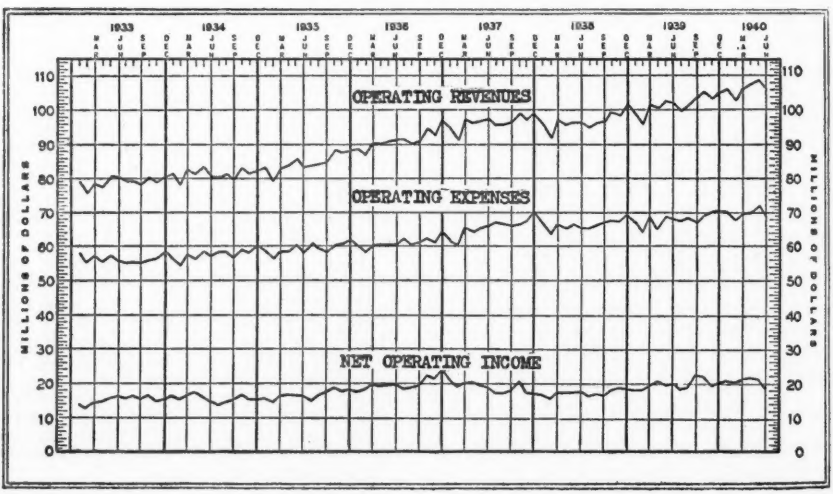
On the other hand, William H. Grimditch, vice president of Philco Corp., praised the commission's order. He said that it "marks the beginning of a period of enlarged opportunity for the radio broadcasting industry." Principal criticism seems to be aimed at that portion of the commission's order which would require the National Broadcasting Company to dispense with the ownership and control of the so-called "Blue network," which the commission said had been used as a "buffer to protect the powerful Red [network] against competition."

The commission's majority declared that among the three large broadcasting companies (National, Columbia, and Mutual) 97 per cent of the nation's broadcasting facilities are "affiliated" by contracts to one or the other of the four "networks" (National owning two of these).

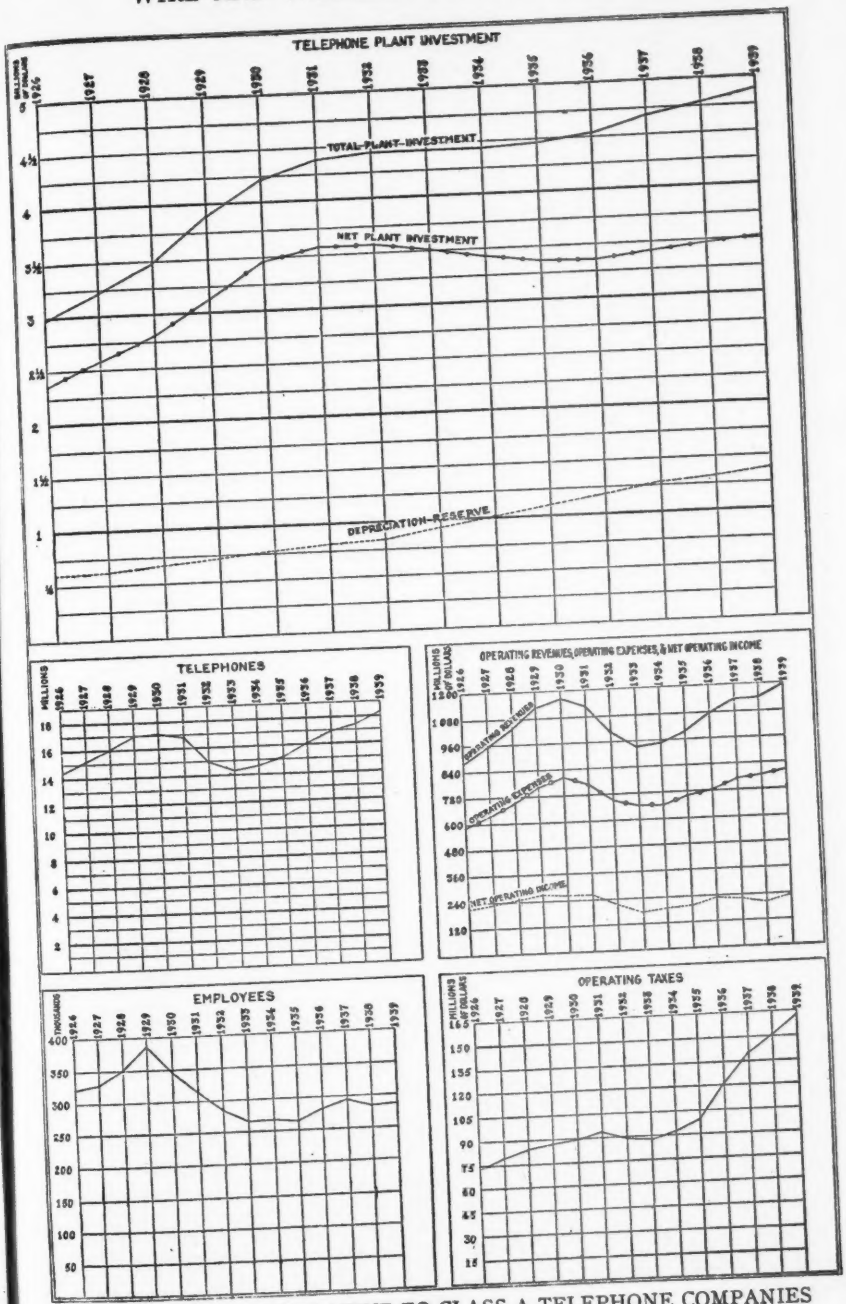
The commission finds the network system, as such, to be "in the public interest," but it objects to the general character of the contracts upon which the networks are built on the ground that they are unduly restrictive and tend toward "monopolistic" conditions, and it objects to one company operating two networks.

Three possible alternatives, it said, are open for conduct of broadcasting. One is

TELEPHONE STATISTICS SHOWING OPERATING REVENUES, OPERATING EXPENSES, AND NET OPERATING INCOME OF TELEPHONE CARRIERS REPORTING MONTHLY



Prepared in the Accounting, Statistical, and Tariff Department, Federal Communications Commission



PRINCIPAL ITEMS RELATIVE TO CLASS A TELEPHONE COMPANIES

free competition, another is government ownership and control, and the third such rigid regulation as is now applied to telephone and telegraph companies. Of the three it favors free competition which, it believes, "after a fair test, will best protect the public interest. That is the American system." It would have the broadcasting stations which constitute a single network free to change "affiliation" and to choose or reject programs without regard to their source. In general, it would have the ties which affiliate a broadcasting station to a network greatly loosened so as to give each station a wide measure of autonomy in its operations, and throw the field open to a continuously active competition between the three major organizations for outlet of their programs. It would also compel divestment by the company which at present operates two networks of one of them.

THE commission minority opposed these views and insisted that the result would not be to the advantage of the public, as it may bring about a situation "in which competition among competently managed networks would be replaced by an unwholesome conglomeration of opportunistic 'time-brokers' catering to an aggregation of local monopolies in various towns and cities" which "instead of resulting in 'free competition' would more likely create 'anarchy' or a kind of business chaos in which the service to the public would suffer."

Chairman Fly said that if judicial action is to be taken against the major broadcasting companies, it is "up to the Attorney General."

* * * *

THE FCC's action on May 2nd, giving the television industry a green light for commercial operation July 1st was not expected to start very much of a boom industry. A year ago the Radio Corporation of America was all set to go with active promotion of the sale of television receiving sets. Then the FCC intervened with its order holding commercial operations in abeyance pending further agreement within the industry on engineering standards.

Since then the war situation with a shortage of materials and trained technicians has altered the picture. Last March network representatives of both NBC and CBS before FCC hearings warned against setting commercial television off to "another false start."

Now that the commercial ban has finally been lifted, the manufacturers are beginning to hint that it might be well, in view of the uncertain state of affairs, to hold back active promotion of commercial television as a backlog to take up the economic slack which is expected to follow the completion of the nation's defense effort. However, the FCC by its action on May 2nd has finally acquitted itself of charges that it is "blocking" commercial television. The standards finally agreed upon fixed the television image at 525 lines with 30 frames a second interlaced.

The commission requires the sound signals to use frequency modulation but the transmission of visual signals will be effected by amplitude modulation. After six months of practical tests, the FCC will consider further changes, possibly color transmission.

While no intensive promotion of television was in prospect, it was anticipated that some of the established stations would take up the new radio medium in a modest way, serving as much of an audience as the limited supply of television receivers will make available.

* * * *

ON May 5th, two merger hearings of interest to the communications industry began in Washington, D. C., and Philadelphia, Pennsylvania, respectively.

In the capital city the Senate Interstate Commerce Committee, under the chairmanship of Senator Wheeler, began the exploration of the proposed merger of the two national telegraph companies. In Philadelphia hearings were continued before an FCC examiner in the proposed merger of the Keystone Telephone system with the New Jersey Bell Telephone Company.

Financial News and Comment

By OWEN ELY

Niagara Hudson Power

We are including Niagara Hudson Power in the current series of reviews on leading operating companies, because while technically both a holding company and the subsidiary of a registered holding company it properly belongs in the operating company class. Since United Corporation owns over 10 per cent of the voting stock, the SEC classifies Niagara as a subsidiary, though both corporations have denied any managerial connection. And while the Niagara system comprises some twenty companies (with five principal operating subsidiaries), about thirty companies have already been eliminated, and a general merger of the operating companies has been proposed to the public service commission of New York (though temporarily the plan is held in abeyance owing to changing economic conditions and the defense effort).

Niagara Hudson is affiliated, through the Schoellkopf-Carlisle-Brady interests, with Consolidated Edison of New York, and owns 201,500 shares of that company's common stock (at present prices worth about $4,000,000). It also owns 445,738 shares (29.72 per cent) of Central Hudson Gas & Electric Corporation, with which it has an extensive power interchange. Investments in other-than-system companies are carried at about $18,000,000.

The Niagara system, entirely intrastate except for two small Canadian units, is the largest distributor of electrical energy in the world, though in dollar assets the system is only about half as large as Consolidated Edison. It supplies electricity to many of the principal communities in upstate New York. (A sizable area in the southern and extreme northern sections is serviced by Associated Gas.) The electric properties are closely interconnected; about half the power is obtained at Niagara, 10-20 per cent generated at other hydro stations, 15-20 per cent purchased, and the balance generated from steam. An important steam plant is being constructed at Oswego. Niagara Hudson also supplies gas to many cities, gas sales being about 12 per cent of system revenues. Natural gas is purchased from New York State Natural Gas Corporation (an affiliate of Standard Oil and Columbia Gas) and is sold straight or mixed with manufactured gas, which is produced at Syracuse.

The five principal operating subsidiaries are New York Power & Light and Central New York Power, directly controlled; Buffalo, Niagara Electric, Niagara Lockport & Ontario Power, and Niagara Falls Power, controlled through the subholding company, Buffalo, Niagara & Eastern Power. The first two companies are bonded at about $66,000,000 and $61,000,000, respectively, while the three Niagara companies have an aggregate funded debt of about $98,000,000. System capitalization may be summarized as follows:

	Millions	*Percentage*
Funded debt of subsidiaries	$224	42%
Preferred stocks of subsidiaries	127	23
Serial bank notes (parent company)	8	1
First preferred stock	38	7
Second preferred stock	10	2
Common stock and surplus (9,581,009 shares)	134	25
	$541	100%

The system thus has a conservative funded debt ratio, but the proportion of common stock equity seems a little below average. An analysis of the 1940 consolidated income statement shows how the revenue dollar was disbursed:

Expenses	35%
Depreciation	12
Maintenance	6
Taxes	19
Fixed charges*	18
Dividends	4
Balance to surplus	6
	100%

*Including subsidiary preferred dividends and crediting miscellaneous system income.

The proportion of the revenue dollar absorbed by depreciation and taxes has increased rapidly in recent years. Thus in 1933 the predecessor corporation appropriated only about 12 per cent of revenues for maintenance and depreciation, as compared with the present 18 per cent; and taxes absorbed only 14 cents of the revenue dollar contrasted with the present total of 19 per cent (and the still larger total faced in 1941). The resulting decline in share earnings is indicated in the table below, which reflects the common stock record in recent years.

			Price Range	
Year	*Earned*	*Dividend*	*High*	*Low*
1940	$.66	$.15	6	3
1939	.51	..	9	5
1938	.50	.25	10	5
1937	.84	.40	17	4
1936	.81	.40	18	8
1935	.50	..	11	3
1934	.46	..	10	3
1933	.66	.25	16	5
1932	1.07	.80	20	8
1929	1.83*	.60*	92*	34*

*Adjusted to reflect one-for-three exchange in 1932.

Principal system stocks are listed on the New York Curb, current prices and yields being about as follows:

	Price	*Yield*
Buffalo, Niag. & Eastern		
$5 1st preferred	94	5.3%
$1.60 2nd preferred	18	8.9
Niagara Hudson Power		
$5 1st preferred	64	7.8
$5 2nd preferred	58	8.7
Common (15¢)	2¼	6.7

Owing to the rapid increase in power output, coupled with defense activities (the week ended April 19th showed a gain of nearly 24 per cent over last year), earnings on the common stock for the twelve months ended March 31st increased to 73 cents a share compared with 47 cents in the previous period. The common stock is, therefore, selling currently at only about three times the earnings, and at about one-third last year's high.

This result is probably due in large part to fears regarding eventual government competition which might result from the St. Lawrence waterway and power development. This project, formerly rejected by Congress, has been revived by President Roosevelt through the use of emergency war funds to initiate test borings, etc. Due to the facts that it will require several years to complete the power development, and that a steam plant could probably be built more cheaply and quickly, there has been considerable criticism of the project as a "defense" measure. There is some present indication that the administration may not try to push the necessary legislation through Congress at this time. At current levels Niagara's preferred and common stocks appear to have discounted rather adequately this unfavorable development, particularly as the company would probably coöperate with the government in distribution of any power which would become available from the Federal project.

Dividend Restrictions Planned To Hasten Holding Companies' Dissolution?

IN its "integration" orders issued under § 11, the SEC has indicated that a year or so would probably be allowed to dispose of operating properties which do not fit into the "picture" as envisaged by the commission. Possibly anticipating dilatory tactics or court appeals, the SEC appears to be preparing a few legal "big sticks" for use on recalcitrant or tardy holding companies. One of these, on which the industry has been asked to

give its views, was discussed a fortnight ago in this department—the proposal that preferred dividends should be paid to the public ahead of payments of principal or interest on debts to parent holding companies.

Another and far more drastic proposal (thus far only in the rumor stage) was perhaps forecast in the El Paso Electric decision. The commission required the company to reduce its funded debt from 62.4 per cent of total capitalization to 54 per cent, and imposed a restriction on common stock dividends which eventually would bring the ratio below 50 per cent. Again in the Florida Power Case the commission fixed a dividend restriction, pending reduction of the ratio of debt to net property to 50 per cent. The criticism leveled at the Consumers Power debt ratio, upsetting that company's finance program, will also be recalled.

According to a special story in *The New York Times,* the SEC, instead of applying its ideas from time to time as special questions of financing come before it, may now consider applying a general and uniform application of the 50 per cent ratio. It is not clear whether the commission prefers a ratio to total capitalization, or to net property account. The latter would seem more logical, although in most cases it represents a more stringent requirement, since net property is usually a smaller figure than capital and surplus.

Such a rule could not easily be evaded. Property write-downs and reductions, while frequently considered necessary or desirable by the SEC, would of course have the effect of increasing the funded debt ratio, thus aggravating the problem. One possible solution would be to issue preferred or common stock in refunding operations, along with bonds; but this would, of course, reduce the potential savings from refunding, and common stock sales would create a minority interest which most holding companies seek to avoid. The most drastic solution —and one which the SEC might not be averse to—would be to sell the operating company to the public—lock, stock, and barrel — in which case the commission would no longer have jurisdiction over dividend payments (except perhaps in financing operations under the Securities Act).

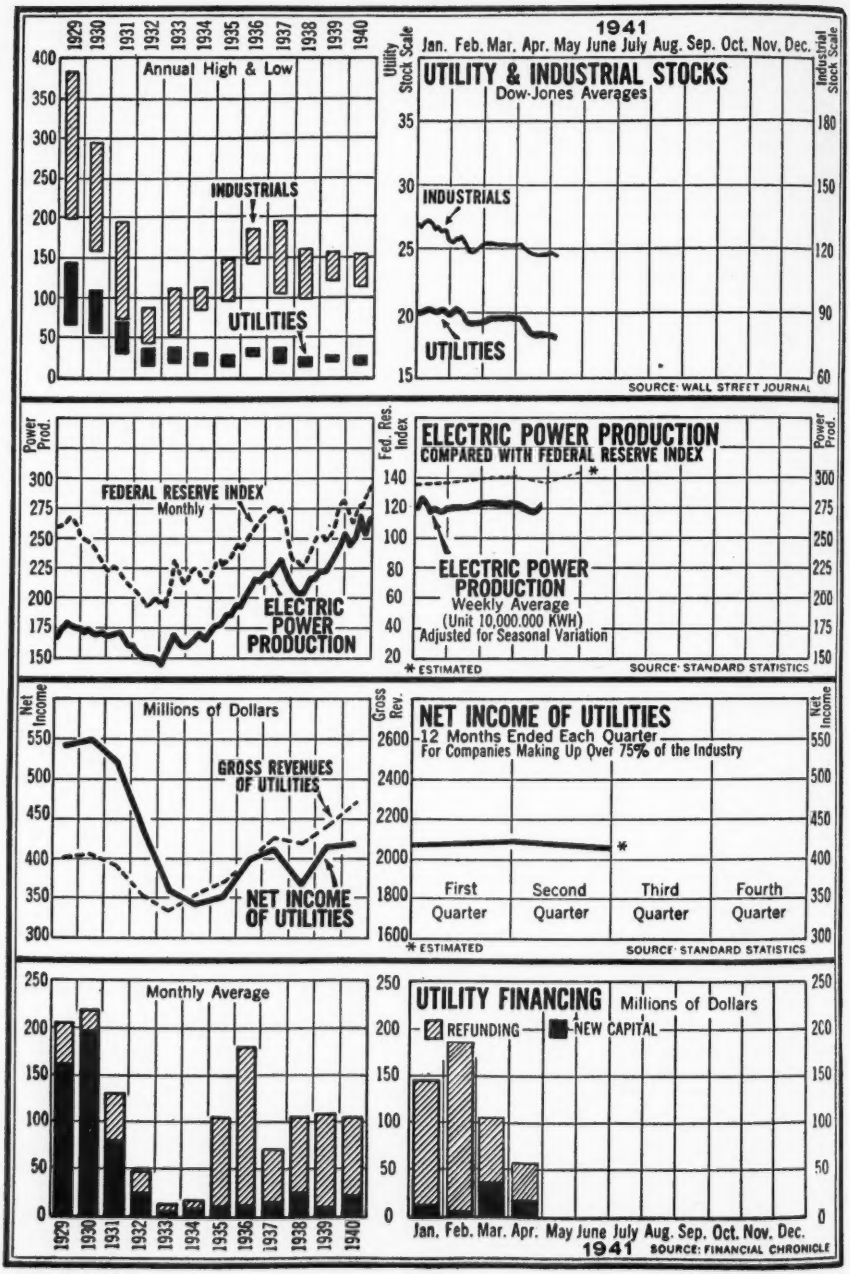
THE tables on pages 678 and 679 list alphabetically the principal holding company systems, showing the more important operating subsidiaries whose ratio of funded debt to net property account in 1939 exceeded 50 per cent. In the second column the common stock dividends paid in that year are tabulated. In some cases, due to small minority holdings, not all these dividends were paid to the holding company, and in other cases they did not reach the top holding company because of absorption by subholding companies. Hence further analysis would be necessary to show the exact effects on the holding company's income, particularly in systems such as Associated Gas & Electric and United Light and Power. However, the tabulation will serve to illustrate the damaging effects which such an arbitrary rule might have on holding company finances, in many cases endangering the payment of interest and preferred dividends. If the commission at the same time should set up more rigid depreciation requirements, the effects on holding company utility finance, when combined with threatened increases in the tax burden, might be rather devastating.

If the ratio were set up as 50 per cent of total capitalization, many companies listed in the tabulation could be omitted. While the figures differ in each case, in general a ratio of 55 per cent to net property would seem roughly equivalent to 50 per cent of total capitalization; and a 55 per cent ratio would eliminate some important companies such as West Penn Power, Pennsylvania Electric, Consumers Power, Dallas Power & Light, Virginia Electric & Power, Central New York Power, Buffalo, Niagara Electric and Columbus & Southern Ohio Electric. However, even with this modification the results would be sufficiently drastic to make it advantageous or necessary in many cases to liquidate holding company investments in the companies affected.

System and Operating Company	Ratio Funded Debt to Net Property 1939	Common Dividends Paid in 1939 (000 omitted)
American Gas & Electric		
Ohio Power	62%	$4,374
Indiana & Michigan Electric	57	718
Kentucky & West Virginia Power	61	92
American Power & Light		
Florida Power & Light	57	..
Central Arizona Light & Power	57	650
Kansas Gas & Electric	60	642
Texas Power & Light	56	1,100
Portland Gas & Coke	51	..
Nebraska Power	58	1,300
Pacific Power & Light	68	200
Northwestern Electric	51	..
American Water Works		
Potomac Edison	60	420
Monongahela West Penn	60	157
West Penn Power	55	4,329
Associated Gas & Electric		
Tide Water Power	75	..
New Jersey Power & Light	78	915
Kentucky-Tennessee Light & Power	52	165
Eastern Shore Public Service	62	85
Northern Pennsylvania Power	56	385
Metropolitan Edison	56	2,480
Florida Public Service	69	..
Florida Power	54	434
Pennsylvania Edison	66	225
Pennsylvania Electric	53	2,045
Georgia Power & Light	59	..
Louisiana Public Utilities	55	..
Virginia Public Service	84	..
Keystone Public Service	83	180
Cities Service Power & Light		
Toledo Edison	58	1,804
East Tennessee Light & Power	57	18
Springfield Gas & Electric	75	200
Public Service of Colorado	68	1,877
St. Joseph Railway, Light, Heat & Power	60	140
Ohio Public Service	65	1,872
Empire District Electric	56	..
Central Arkansas Public Service	73	..
Commonwealth & Southern		
Ohio Edison	71	1,940
Mississippi Power	59	..
Alabama Power	55	755
South Carolina Power	57	..
Consumers Power	54	4,048
Pennsylvania Power	52	220
Electric Power & Light		
Arkansas Power & Light	58	..
New Orleans Public Service	63	..*
Louisiana Power & Light	54	456
Dallas Power & Light	51	945

*Paid $75,337 in 1940, large preferred arrears having been cleared up in that year.

Engineers Public Service		
Savannah Electric & Power	53	..
El Paso Electric	67	263
Virginia Electric & Power	53	2,231
Puget Sound Power & Light	53	..
Gulf States Utilities	59	1,120
Middle West Corporation		
Kansas Electric Power	59	208
Public Service of Oklahoma	53	600
Central Power	60	..
Central Power & Light	64	..
Lake Superior District Power	52	92
Southwestern Gas & Electric	62	545
Southwestern Light & Power	52	..
Oklahoma Power & Water	74	24
Central Illinois Public Service	59	..
Michigan Gas & Electric	58	..
Michigan Public Service	60	..
Arkansas-Missouri Power	62	83
Wisconsin Power & Light	62	..
West Texas Utilities	59	..
Kansas Power	62	..
Northwestern Public Service	65	..
Kentucky Utilities	69	206
Missouri Public Service	57	26
National Power & Light		
Houston Lighting & Power	62	1,800
Pennsylvania Power & Light	69	3,852
Niagara Hudson Power Company		
Central New York Power	55	1,456
New York Power & Light	54	..
Buffalo, Niagara Electric	52	2,743
North American Company		
Illinois-Iowa Power	90	..
Missouri Power & Light	60	200
Kansas Power & Light	60	840
Wisconsin-Michigan Power	57	470
Wisconsin Electric Power	83	210
Union Electric of Missouri	59	6,039
Wisconsin Gas & Electric	56	495
Ogden Corporation		
Interstate Power	65	..
Central States Power & Light	64	..
Laclede Gas Light	64	..
Standard Gas & Electric		
California Oregon Power	55	..
Wisconsin Public Service	57	..
Oklahoma Gas & Electric	59	1,151
United Gas Improvement		
Luzerne County Gas & Electric	57	44
Delaware Power & Light	58	1,425
United Light & Power		
Milwaukee Gas Light	57	315
Iowa-Nebraska Light & Power	60	562
Kansas City Power & Light	58	3,281
Columbus & Southern Ohio Electric	53	1,201
Michigan Consolidated Gas	56	1,784
San Antonio Public Service	69	291


Annual High & Low
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940
INDUSTRIALS
UTILITIES
1941
Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.
UTILITY & INDUSTRIAL STOCKS
Dow-Jones Averages
Utility Stock Scale
Industrial Stock Scale
INDUSTRIALS
UTILITIES
SOURCE: WALL STREET JOURNAL
FEDERAL RESERVE INDEX
Monthly
ELECTRIC POWER PRODUCTION
ELECTRIC POWER PRODUCTION
COMPARED WITH FEDERAL RESERVE INDEX
Power Prod.
Fed. Res. Index
ELECTRIC POWER PRODUCTION
Weekly Average
(Unit 10,000,000 KWH)
Adjusted for Seasonal Variation
* ESTIMATED
SOURCE: STANDARD STATISTICS
Millions of Dollars
GROSS REVENUES OF UTILITIES
NET INCOME OF UTILITIES
Net Income
Gross Rev.
NET INCOME OF UTILITIES
12 Months Ended Each Quarter
For Companies Making Up Over 75% of the Industry
First Quarter
Second Quarter
Third Quarter
Fourth Quarter
* ESTIMATED
SOURCE: STANDARD STATISTICS
Monthly Average
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940
UTILITY FINANCING
Millions of Dollars
REFUNDING
NEW CAPITAL
Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.
1941
SOURCE: FINANCIAL CHRONICLE

What Others Think

A Governor's Plea for State Water Rights

We must cling to our Federal union which is designed to protect and foster our national institutions. But at the same time we must recognize the need for local regulation and administration. This was the distinction emphasized by Governor Ralph L. Carr of Colorado in an address before the conference committee on natural resources and defense in connection with the recent annual convention of the United States Chamber of Commerce in Washington, D. C.

The national government, said the speaker, is not qualified to solve all the local problems of all sections of the country. Nor can it substitute federally controlled regional authorities for satisfactory local government. Artificial home rule cannot be fabricated by first centralizing powers in Washington and then purporting to decentralize them through so-called "regional authorities" bearing a Federal label. The governor stated:

> To no man or group of men has been given the talent to go into the semiarid sections of the West, for instance, and with only two main objectives—flood control and the development of hydroelectric power—to change the manner of life of all of our people and render it necessary for them to modify their activities, their plans, and their thinking so as to become subservient to an artificial authority set up without regard to geography, to climate, to history, to property rights, or to the ideals of the individuals affected. . . .
>
> Recently there was introduced into the Congress a measure intended to place the drainage basins of the Arkansas, the St. Francis, the Red, and the White rivers, under a regional authority by a law drafted along the lines of the Tennessee Valley Authority bill.
>
> To a board of three men appointed by the President of the United States and responsible only to him, absolute control would be given over the drainage basins of those four rivers, including every drop of water which falls therein.
>
> Under the Constitution, the states reserved the power to compact with respect to any question not national in its nature. By this act the states through which the rivers run might not compact without permission from the authority. No highway, no bridge, no ditch might be constructed without the consent of that board. All financial questions would be settled by provisions of the bill which would give the authority the right to expend not more than $150,000,000 and to issue the bonds of the United States government therefor, in order to acquire property either by purchase or by condemnation and to construct reservoirs, canals, and hydroelectric power systems. Further, it might set up single projects at a cost not to exceed $50,000,000 each. But there would be no limitation of the number of such projects.

Governor Carr praised the past achievements of the Bureau of Reclamation in developing the semiarid wastes. He likewise praised the flood-control work of the Corps of Army Engineers. But the Arkansas Valley Act, the governor fears, would rob his state of precious water rights. It would emphasize flood control and hydroelectric development at the expense of other interests. He observed that, in a section fairly well served with power, where flood control is not essential, "the major interests and industries should be consulted and preserved."

He mentioned coal mining in southern Colorado and said that "No man has explained the necessity for controlling the river flow when the power is carried to consumers on copper wires strung on poles far from the river channel." He suggested that "someone wishes to control the whole river drainage." He continued:

> If the lower states need protection from floods and if they can develop cheaper power, no one in the dry section objects. But in order to build great public works it has not been necessary in the past to assume control over a whole river drainage. If Colorado is

without the area of heavy rainfall and power possibilities it should not be included with the authority's jurisdiction.

The Arkansas Valley Authority bill is, of course, comparatively unimportant to the people of all the country. It deals with a section which supports only a small number of persons and involves rivers of comparatively little note. To those of us who live in the West, however, it is of vital importance.

By way of suggesting what might be done to prevent the Federal government from gobbling up jurisdiction over all watersheds under authority of the "New River decision," Governor Carr said the act might "declare all rivers west of a certain point non-navigable, thereby denying jurisdiction of the Congress."

FEDERAL ENCROACHMENT THROUGH REGIONAL AUTHORITIES. Address by Governor Ralph L. Carr. Chamber of Commerce of the United States, 29th annual meeting, April 28-May 1, 1941. Washington, D. C.

A Utility Man Talks Plainly On Defense Effort

A BLUNT warning that aid promised by America to nations resisting the Axis is perilously near to being foolhardy was voiced in a speech before the Chamber of Commerce of the United States at its recent annual convention in Washington, D. C., by W. C. Mullendore. Mr. Mullendore is the executive vice president of the Southern California Edison Company, Ltd., as well as a former vice president of the chamber. He told the meeting that America is doing no kindness in leading other people to rely upon aid "which we cannot furnish." First, Mr. Mullendore questioned whether we really know what we are doing, where we are going, and what we are after. He stated:

First of all, is it true that we are committed to the greatest war effort in our history? Who can successfully challenge the truth of that assertion, startling though it seems? Except in general terms, no one has defined, and probably no one can define for us the size or limits of our undertaking. We have not declared war, but the President has clearly indicated that we are committed to seeing war through to a victory over the forces of aggression. How we would define victory, whether it means or will require invasion of Europe by armed force, whether we will pursue victory if England should fall, when we will be satisfied that we have established the "four freedoms" in the world, no one has undertaken to say. But it is incontrovertible that we have allied ourselves with the cause of the British Empire and that we have undertaken to do whatever may be found necessary to bring about the defeat of what is for the present the greatest aggregation of armed force, of military power, the world has ever seen. Whether we should have done so, whether our own vital interests demanded this commitment is still a subject of debate, but so far, at least, as it bears upon the extent of our present endeavor and program, we are officially committed to a "total effort."

THE commitments now made, the speaker said, have carried us from a $10,000,000,000 defense program of eleven months ago to a point where measured by man-hours or dollar value, we have already contracted in excess of the total expenditures for World War I. Are we any better prepared to do this than for World War I? Mr. Mullendore raised some doubts. He conceded that we started off our present defense program with more unemployment, more idle production capacity, and greater agricultural surpluses than in 1916-17. In short, we were better prepared to handle the load. Also, we have made great improvements in production technique, particularly in production per man-hour—thanks to the efficiency of our application of mechanical energy. But are we strong in other respects? The speaker continued:

Nevertheless, some people assert that even if that be true, we are stronger and comparatively better equipped to produce than when we made our greatest previous effort in expansion of production twenty-four years ago. But are we stronger? Let us see. In 1916 the Federal debt was less than one and a quarter billion dollars. Today it is fast approaching fifty times that amount. In 1916 our normal Federal expenditures were $734,000,000; now they are about eight and one-half billion; in 1916 Federal taxes were

$726,000,000; by 1940 they had increased some 600 per cent. In 1916 the attitude of government toward business was friendly. Today there is far too much suspicion and jealousy, not to say hostility, in government leadership toward business leadership, and their joint efforts are less coöperative and hence less effective.

A similar growth of suspicion and hostile attitude characterizes the relationship between labor and management as compared with 1916. Not only are labor resources impaired by this increased antagonism between management and labor but the hours worked are shorter and the rate per hour is higher. During the past decade and prior to the war construction, the country's expenditure on plant and equipment has been insufficient by a wide margin to maintain the capacity of the previous period or to keep pace with the growth of population. The average age of our durable goods, such as houses, railroads, and much of our manufacturing equipment was much greater in 1940 than in 1930. Also, a very large percentage of the consumption of the depression decade has been provided for not through the concurrent exchange of goods and services for goods and services, but through the acceptance of future promises to pay in exchange for the goods and services consumed, thus contributing to that unbalanced condition which today threatens the breakdown of our exchange system. Since 1916, our standard of living has greatly increased, at least in the sense that it takes more labor, materials, and services to meet the demands included within normal living requirements, and hence a greater proportion of total production is taken by normal consumption.

Mr. Mullendore said that we have obviously failed to grasp the full meaning of "total effort." As a nation we are indifferent about the interruption of vital war production. We are indifferent about the pursuit of nonessential projects by governmental agencies. We are indifferent to the lack of unity in definition or acceptance of war aims and purposes or the extent of our participation therein.

THE speaker warned that we must prepare for greater sacrifices, such as may be required through "priorities." In the last war we cheerfully went without such foods as wheat, meat, and sugar to supply our fighting forces and allies. We must do this again and more. Agents and agencies of government must likewise curtail the less essential of their activities and expenditures at this time.

We must sacrifice to protect national solvency. National insolvency—a breakdown in credit and possible inflationary collapse—would leave only the alternative of total regimentation. We seem to have forgotten that the swollen bank deposits and easy credit upon which we rely as evidence of capital and purchasing power for unlimited defense expenditures are largely the result of wealth consumption instead of wealth creation. They are the result of debts and deficits rather than savings and accumulation.

The speaker recalled a warning contained in the Reynaud-Daladier report just prior to the fall of France: "Actually that part of the French population which creates wealth, which labors for the future, is continually diminishing, while that part which, directly or indirectly, lives on the state is constantly growing." It was this trend which culminated in the words of Marshal Petain, also cited by Mr. Mullendore: "The spirit of pleasure has prevailed over the spirit of sacrifice. The people have demanded more than they have given. They wanted to spare themselves effort." Petain was referring to the French defeat.

TURNING to nonessential activities of our Federal government, Mr. Mullendore made some references of special interest to the utility industries:

> Our government has a responsibility beyond that of merely refraining from unnecessary expenditure. Government must set the example in economy, and while asking sacrifices from those who pay, also require sacrifices from those who benefit from its appropriations. For example, it is difficult for the taxpayer to see the justification for doubling the expenditures of the Office of Government Reports, for expanding the activities of agencies dealing with improving land practices, or of immediately intensifying the program of the Fish and Wild Life Service.
>
> Nor are the proposals confined to the expansion of already existent activities which have no clear relation to immediate defense needs. Additional activities are urged—all in the name of national defense. Not content with the extensive regulations of the power, coal, and other industries, it is being urged also that the oil industry should be brought under similar governmental control. Further,

The (Baltimore, Md.) *Sun*

"COM' ON BREAK IT UP!"

a strenuous effort is being made to throw the cloak of national defense over the promotion of such projects as the St. Lawrence waterway and other authorities to be modeled after the TVA.

Many of these projects could not be justified under conditions of peace and prosperity. Now, when they could not possibly be completed in time to contribute to the really urgent defense needs, but when they would divert labor and materials which are badly needed in defense industries, to attempt to justify them by specious reasoning and juggled facts which connect them with defense, raises serious question as to whether there is adequate understanding of the seriousness of our crisis within those government circles where we expect to find it first and above all.

In a concluding plea to look out for our own interests that we may not destroy

ourselves in saving others, Mr. Mullendore stated:

> One of our greatest perils in our present pursuit of missions abroad is that we shall undertake more than we can perform, and in the exhaustion resulting from overtaxing our strength, fail both in our rescue mission and in the maintenace of our own republic. A false and foolish pride which prevents men and nations from recognizing the limit of their power and resources has led to many tragedies. We are now making very broad and generous promises of aid and assistance throughout the world to an extent which is perilously near to being foolhardy. To lead other peoples to rely upon aid which we cannot furnish is no kindness to them nor credit to us.
>
> We are responsible if we mislead others to their injury, and we alone can appraise accurately our ability and determine what is within our power to undertake and adequately perform. The rôle of hero requires not only boldness and courage but judgment as well.
>
> The demands upon us from those to whom we have promised assistance will be unlimited. They cannot and will not limit their demands to those which are within our ability to meet. They are properly first concerned with their own salvation, just as we must be. It is therefore up to us to determine what we are able to do, and if we do not limit ourselves to that which we can perform without incurring insolvency or embracing the totalitarian state, we will have failed.

Destiny, the speaker said, has brought us into the midst of one of the great crises of civilization. If we have the will to choose and follow the thorny road of mutual trust and sacrifice, we will emerge with a better civilization. If we fail, another tragic end will be written to another glorious chapter in the upward striving of humanity.

Selling Gas "by the Gallon" for Water Heating

DURING the depression virtually every gas company in the United States was confronted with a difficult revenue situation. In those communities where, for various reasons, the promotion of gas service for space heating was not feasible, water heating was adopted as the most opportune load builder. But, as often happens in the sudden and aggressive promotion of a relatively new type of service, a number of companies found that they could sell water heaters through their merchandising departments but could not keep them sold through their service departments.

In a recent address before the New England Gas Association group, R. N. Hill, president of the Green Mountain Power Corporation, gave an interesting description of what his company did to solve this problem. It was an ingenious shift in the promotional rate approach which got sufficient results to warrant notice and attention of other utilities.

Mr. Hill said that in 1932, after an active sales campaign, his company had succeeded in selling approximately 125 new automatic tank units. A promotional rate that would allow the company about $4 a month for the heating of an average of 1,500 gallons had been put into effect. But when the expected revenue failed to show up, a canvass was taken. It was discovered that more than 50 per cent of the water heaters were already out of service. Since the company could not afford to lower basic rates, a new approach was sought to keep the heaters sold after they had been installed. Mr. Hill stated:

> It occurred to us that if we could sell hot water service instead of gas, we at least would have a new selling approach and that if we could set the hot water service completely outside the sale of gas for cooking and other purposes, we would have two things to sell instead of one. Particularly, we would have something new to sell. Selling gas (whether for cooking, water heating, refrigeration, or any other purpose) is, on the customer's bill, still selling gas; and gas has been sold for a long, long while.
>
> These mental processes led us to the trial of selling hot water service by metering and billing the gallons of water entering the water heater rather than the gas. After certain tests on the heaters we proposed to sell, to determine first, stand-by losses, and second, the cost of hot water production, we checked these results by the installation of twelve heaters with water and gas meters in twelve selected homes diversified so far as

possible as regards size of house, income of owner, and size of family. We went to these twelve people offering to put a heater in for a test of six months' period with no obligation whatsoever on their part, explaining that the object was to test out a new plan and rate for water heating which we had in mind.

A RATE was worked out essentially as follows: If the customer did buy a heater, the company would heat the first 500 gallons a month to approximately 140 degrees for $2.50, and all additional water used at 5 gallons for one cent.

Mr. Hill noted that not one of the 12 test heaters was removed. Instead, the twelve customers formed a nucleus of satisfied users—very helpful in selling the next 100 heaters during the succeeding year. The plan was later modified to adjust the $2.50 monthly minimum for very small heaters and for customers who went on winter vacations or desired other seasonal disconnections. Later the minimum was reduced to $1.50 for 100 gallons, with the excess at the same rate of 5 gallons for one cent.

Evidence of the success of the "by-the-gallon" plan was the sale of 800 units since the plan was adopted. Mr. Hill added:

A fact which fairly well illustrates the preference of customers for "by-the-gallon" plan is that in some instances under our gas promotional gas rate "L," the actual gas to operate heaters would cost somewhat less than the 95 cents to $1, which they pay per thousand feet under the "by-the-gallon" rate. Our salesmen have in many cases pointed out that they might save money on the special gas rate, but the customers seem to prefer the "by-the-gallon" plan because they say they will be sure just what their water-heating costs are and can easily check the amount of hot water used.

In conclusion, Mr. Hill pointed out that every utility customer knows what a gallon of hot water is, although very few of them can visualize a cubic foot of gas (much less a British thermal unit) in terms of hot water. Furthermore, the plan makes it easy for the customer to check up on the efficiency and economical operation of his household. Because a water meter is as easy to read as an automobile speedometer, he can readily determine exactly what he is getting for his money—thereby building up customer confidence in the utility.

SELLING GAS HOT WATER SERVICE BY BILLING THE GALLONS OF WATER HEATED. Address by R. N. Hill before New England Gas Association. Boston, Mass. March 29, 1941.

TNEC Finally Completes a Report

IT would be exceedingly difficult for anyone to agree with all of the views that have been brought out by the Temporary National Economic Committee, either in hearings or in the committee's final report or in the numerous collateral and often conflicting monographs. Indeed, the committee, established in a spirit of controversy and operated in a spirit of compromise, presents one conflict after another in turning up the numerous facets of the social-economic system of the United States which it has so exhaustively investigated.

Yet, the work of this committee, headed by Senator O'Mahoney of Wyoming, represents an intelligent attempt to arrive at some synthesis or advisory blue print on the direction or drift of the nation's political economy. It is sometimes said by the critics of democracy that our so-called freedom consists chiefly in voting one set of politicians out of office and another set in, and liberty to explain the reasons, if any, for our choice. This would imply that the really important and fundamental issues of government are not conscientiously settled by the people even through the euphemism of "representative government."

There is some validity to this criticism, although it is unfairly exaggerated when stated so bluntly. Such is the reason behind the titanic venture undertaken and engineered by the patient Senator from Wyoming. The people of a democracy do, of course, decide funda-

mental issues as well as unimportant ones. But through lack of direction or lack of popular appreciation of the gravity of certain situations, trends in important matters are often allowed to drift into a state of virtual emergency, after which they must be determined haphazardly, desperately, or, in extreme cases, by recourse to war.

HISTORY shows us that most of our troubles in the past might have been averted if the eyes of the nation had been directed to danger signals in time to avoid nasty collisions, such as our Civil War. Senator O'Mahoney has long felt that the trend towards big business, evidenced during the past few decades, is a disturbing symptom of equally critical things to come.

He wanted to find out what was behind this trend towards bigness; whether in a modern day industrial monopoly is inescapable. If not, is the best remedy regulation (*à la* NRA) or beating it up into little pieces (*à la* Holding Company Act)? What are the real facts about the concentration of wealth and the mythical "fifty ruling families"? Is the machine enslaving the worker? Or can mechanized industry be made a servant for more individual leisure and social security?

These and a host of other lesser questions were in the mind of Senator O'Mahoney when he embarked three years ago on a voyage of economic inquiry designed to surpass by far the ambitious precedent of President Hoover's Committee on Social Trends (1932). As Raymond Moley, an editor of *Newsweek* and erstwhile New Deal adviser, pointed out, it was a strange crew that set out on this voyage with Skipper O'Mahoney and quite a different crew that has finally brought the ship back to port.

First of all, in order to get started at all, O'Mahoney had to compromise with the administration which wanted no such thing as an independent congressional investigation of such importance. The result was a hybrid committee made up of representatives of both Congress and the administration. The administration flavor was even more strongly reflected in the organization of the investigation. Under the compromise set-up, the committee simply farmed out the jobs of special investigation to different administration agencies. This left the committee members in the position of having to pass only on such evidence as might be presented by New Deal boards or reach their conclusion on the basis of facts not presented to the committee at all.

FURTHER commenting on the TNEC report, Mr. Moley stated in a recent *Newsweek* editorial:

> The report, judicial as it seems in tone, reveals this flaw. The conclusions and recommendations reported therein arise largely from the philosophy entertained by members of the committee before there was any investigation. Of nothing is this so true as Senator O'Mahoney's recommendation for a species of Federal incorporation. This is the Senator's favorite remedy for economic ills and it occupies a conspicuous place in the report despite the fact that little in the testimony gathered bore specifically on it.

April, 1941, was hardly a propitious time to bring in such an important report. It was easily drowned out by the drums of war. Much dust will probably gather on the committee data before the nation, once more intent on domestic issues, will get around to giving the committee's work the serious attention it deserves.

Two members of the committee died during the investigation, Senator Borah and Herman Oliphant, former Treasury aide. Senator King of Utah, another member, fell by the wayside in an election mishap, while William Douglas and Leon Henderson have had their talents transferred to more exciting fields for the present. *The New York Times,* in one of its usually judicious editorials, commented rather critically on the work of the committee as a whole:

> The TNEC was originally called the "monopoly committee." It had a rare opportunity to study how the extremely complex problems of monopoly and competition should be dealt with legally. Instead of doing this it wandered all over the economic lot, taking up whatever question happened to interest one of its members or some New Deal economist. Its hearings were staged

to air the views of these government witnesses. It would be impossible for a committee of so many members, over so long a period and with so much statistical assistance on call, not to unearth a few facts, or to present some of them in a new light; but the net contribution of the committee, compared with its opportunities, has been deeply disappointing.

The final statement of the committee's chairman offers no new light. After three years of study he appears with a set of figures that a competent newspaper man could get together in two days, comparing assets of corporations with assessed valuations in states, and falling into the old crude fallacy of confusing corporate organization with individual concentration of wealth. He cites the assets of great corporations precisely as if they proved wealth concentration. He does not tell us that the stock of the American Telephone and Telegraph Company is held by 640,000 different individuals, or that the assets of the Metropolitan Life Insurance Company are held for more than 28,000,000 separate policyholders, or that the United States Steel Corporation last year paid six times as much to labor in payrolls as it paid to its bondholders and stockholders combined.

SENATOR O'Mahoney suggested that with respect to monopoly there should be thorough and effective enforcement of the antitrust laws. Inasmuch as one of the main purposes of the committee was to see just what form antitrust laws should take, this is hardly a penetrating conclusion. About the only thing else the Senator has to offer is his own pet suggestion for "national charters for national corporations which transact business on a national scale, in order that they may have a definite and a free place in our economy."

In view of the rapid expansion of the powers of the Federal government through Supreme Court interpretations of what constitutes "interstate commerce" within the meaning of Federal regulatory statutes, there would seem to be today very little inhibition left about the purely "national" caliber of Federal regulation under existing statutes.

What the report has to say about concentration of power is unfortunately expressed in the catch phrases and hackneyed generalities which have characterized public discussion of the subject for many years. It touches not at all upon the dangers of "absentee regulation" centralized in Washington, as compared with the dangers of "absentee ownership" centralized in New York.

However, the committee report does repudiate the doctrine which has been repeated so often during recent years in Washington that our industrial system is mature, if not sterile, and incapable of further expansion and that the remedy is taxing-spending-lending by the government.

The report states bluntly:

> We reject as un-American and unrealistic the belief that the limits of economic achievement have been reached in the United States.

Similarly, the report seems to repudiate the case built up by a couple of the committee's own investigators for strict Federal regulation of life insurance. The committee recommends the strengthening of state regulation rather than Federal control.

A NEUTRAL reader is forced to the conclusion that the world at large and the American public in particular knows no more about the care and feeding of monopoly or the cause and effect of concentrated economic power than when the TNEC started on its voyage. Maybe a future Congress will salvage some pearls of wisdom from the 79 volumes of hearings and monographs but, in any event, Senator O'Mahoney is at least entitled to a vote of thanks for a good try.

—F. X. W.

¶ "Too *many of you gentlemen* [*in considering whether rural electrification should be developed by private industry or through an REA co-op*] *are looking at this thing from a business standpoint, and not from the standpoint of government.*"

—W. R. POAGE,
U. S. Representative from Texas.

The March of Events

EEI Convention Plans

NATIONAL defense is to be the keynote of the annual convention of the Edison Electric Institute which opens in Buffalo, New York, on June 2nd, extending through June 5th, with headquarters at the Statler hotel.

Scheduled speakers include W. P. Witherow, president of the Blaw-Knox Company and chairman of the national defense committee of the National Association of Manufacturers; W. L. Batt, deputy director of the Office of Production Management; Constantine Brown, foreign affairs editor of *The* (Washington) *Star;* and Carl Snyder, author of the recent important and best-selling nonfiction volume, "Capitalism the Creator."

Members within the industry who will participate in the program include C. W. Kellogg, president of the Institute, now on special duty with the Office of Production Management in Washington; R. E. Fisher, chairman of the Institute's general sales committee; Tom P. Walker, vice president of the Gulf States Utilities Company; C. E. Greenwood, commercial director of the Institute; C. J. Strike, president of the Idaho Power Company; T. G. Hieronymus, Kansas City Power & Light Company; M. W. Smith, vice president of Westinghouse Electric & Manufacturing Company; E. S. Fields, Cincinnati Gas & Electric Company; A. E. Silver, Ebasco Services, Incorporated; and D. C. Prince, manager of commercial engineering, General Electric Company.

The convention is in charge of a general committee which will serve as host. The committee consists of Colonel William Kelly, president of the Buffalo, Niagara & Eastern Power Corporation (chairman); Herman Russell, president, Rochester Gas & Electric Corporation, Rochester, New York; John L. Haley, president, Central New York Power Corporation, Syracuse, New York; Ralph D. Jennison, president, New York State Electric & Gas Corporation, Binghamton, New York; T. W. Connette, vice president and general manager, New York State Electric & Gas Corporation, Lockport, New York; and M. E. Skinner, vice president, Buffalo, Niagara Electric Corporation, Buffalo, New York.

Because of Buffalo's location near Niagara Falls and the Canadian border, tours have been arranged for both American and Canadian visitors to the convention to enjoy the scenic beauty of the Niagara gorge and surrounding territory. Special entertainment features will include a concert by the Buffalo Philharmonic Orchestra with Rose Bampton, celebrated soprano of the Metropolitan Opera Company, appearing as guest soloist.

A special tea for the ladies attending the convention and other social sessions are also scheduled.

Northwest Power Inadequate

THE House Appropriations Committee on April 30th approved a $177,019,078 appropriation bill for the Interior Department containing more than $78,000,000 for expanding Federal power developments in the Far West.

Secretary of the Interior Harold L. Ickes had previously warned Congress that present government power facilities cannot meet the requirements of the defense program. Other department officials reported an "acute shortage" of power in the northwestern section of the United States.

Their statements were revealed on April 30th in testimony before a House Appropriations Subcommittee on the Interior Department's request for $180,000,000 for the 1942 fiscal year. They were released as the Appropriations Committee prepared to submit its recommendation to the House.

Mr. Ickes said his department was devoting much of its work to national defense—marshaling resources, developing supplies of critical minerals, construction of defense roadways, and creation and distribution of electric power.

Administrator Paul J. Raver of Bonneville dam said industrial production in the area "will fall far behind defense needs" unless the output of government power projects is stepped up.

Estimating that $500,000,000 in defense contracts awarded for the Northwest alone would require at least 300,000 kilowatts of power, Mr. Raver pointed out that under present schedules Bonneville and Grand Coulee dams will not reach 302,400 and 324,000 kilowatt production, respectively, until next January 1st.

Nearly eleven million dollars of the $22,858,500 Bonneville Power Administration appropriation reported out by the House committee will be devoted to additions to the government's network of 230,000-volt lines which bring power from Grand Coulee and Bonneville dams to the Northwest load centers.

The new money, when made available to the Power Administration, will include $1,730,000 for completion of the construction of a 185-mile line from Grand Coulee dam to the Puget Sound region, $1,219,000 for a third 230,000-volt line between Bonneville dam and Vancouver, Washington, $3,785,000 for a second 230,000-volt circuit connecting Bonneville and Grand Coulee dams, and $4,022,900 for substation work at Covington, Seattle, Midway, North Bonneville, and Vancouver.

The appropriation will provide for the expenditure of $2,716,000 for the construction of additions to the government's 115,000-volt transmission system serving northwest Oregon and the Portland-Vancouver district. This fund includes a line between the government's St. Johns substation and Oregon City, and substation construction at Bonneville, St. Johns, and Oregon City. It also includes appropriations for the construction of two 115,000-volt lines direct from Bonneville dam to the government's substation contiguous to the Aluminum Company of America plant.

Other items included in the new appropriation were $4,500,000 for feeder lines and service connections; $500,000 for advance surveys and investigation; $1,000,000 for tools, equipment, and stock inventory; $250,000 for permanent buildings; $885,600 for operation and maintenance; $250,000 for power purchases; and $2,000,000 for emergency construction in the Grand Coulee area.

RFC Aid Offered

FEDERAL Loan Administrator Jesse Jones on April 30th offered the vast finances of the Reconstruction Finance Corporation to facilitate competitive financing of the utility industry. Jones said at a press conference that he "agreed heartily" with a recent rule of the Securities and Exchange Commission which would require competitive bidding for utility financing beginning May 7th.

He declared that the RFC did not intend to compete with the banks for utility financing but was willing to coöperate, particularly when the amount involved may be too large for the banks to handle without RFC participation. A proposed $120,000,000 financing of the Columbia Gas & Electric Company, Jones said, may be one instance when RFC help may be needed.

Asked whether the RFC interest was to assure low interest rates in utility financing, Jones replied, "No, our interest is fair rates and on terms the borrowers can meet."

Ickes Urges New Dam

SECRETARY of the Interior Ickes recently sent to Congress and the President a report recommending construction of a "multipurpose power and irrigation dam" on the Colorado river 67 miles downstream from Boulder dam. The cost of the dam was estimated at $41,200,000.

The dam, to be known as the Bullshead dam project, is necessary "to meet growing population needs and national defense requirements in that region," the Secretary said. "Demands for power in the Southwest are definitely outrunning present means of meeting them. I have hopes that the Bullshead project, with the Parker dam project and other smaller developments to follow, will meet the situation for some years.

"Owing to the manner in which Bullshead fits into the plan for the development of the lower Colorado river, no allocation of costs is made to benefits other than to power for this multipurpose project."

Ickes said sales of electric energy were expected to yield revenues to cover the cost of operation and maintenance and to amortize the entire cost of the project in forty years with interest.

An appropriation of $5,000,000 to begin construction work on the project has been recommended to Congress by the Bureau of the Budget.

The Bullshead power plant would have an estimated capacity of 225,000 kilowatts—about a third the size of Boulder's installed capacity of 704,800 kilowatts. The plant will consist initially of four 45,000-kilowatt generating units. Allowance will be made and space provided for a fifth unit of the same size.

Transmission lines from the Bullshead power plant will connect with the Parker plant and service commercial load centers at Phoenix, Tucson, Yuma, and the Gila project in Arizona, and the Imperial and Coachella valleys in southern California, it was explained.

New Director for SEC Division

JOSEPH L. Weiner, director of the public utilities division of the Securities and Exchange Commission, resigned recently to take a position with Leon Henderson's new Office of Price Administration and Civilian Supply. Robert H. O'Brien of Butte, Montana, was appointed director of the division to succeed Mr. Weiner.

Appointment of John W. Houser of Long Beach, California, and George Rosier of New York as assistant directors of the division was also announced. All three appointees were members of the commission's staff. The position of associate director, hitherto held by Mr. O'Brien, was abolished.

Mr. O'Brien had been associate director since June, 1939. To his work is ascribed much of the success of the public utilities division in meeting demands on its resources made by the many recent proceedings under the Public Utility Holding Company Act.

Denies Lobbying Charges

DECLARING that the Temporary National Economic Committee is unfair in per-

mitting its employees to issue documents for which the committee itself does not assume responsibility, Donald D. Conn, executive vice president of the Transportation Association of America, challenged the accuracy of the statements contained in a monograph entitled "Economic Pressure and Political Pressures" recently compiled by two employees of the committee and published at government expense.

Mr. Conn released a letter addressed to Senator Joseph C. O'Mahoney, chairman of the TNEC, in which he took vigorous exception to statements contained in the monograph to the effect that the Transportation Association of America was conceived or organized by the railroads for lobbying purposes.

"As a matter of fact," said Mr. Conn, "the railroads had nothing to do with organization of this association, which is composed of 3,900 corporations engaged in agriculture, industry, finance, as well as transportation. Of approximately 4,000 votes cast at the last annual meeting, 84 represented railroads. There are more farm groups in the association than there are railroads, and of its board of directors of forty-eight only four represent railroad interests. The association is strictly educational and research in character. It maintains no office at Washington or state capitals, and is not engaged in lobbying of any kind. It only appears before congressional committees upon request and to give technical advice on transport legislation."

Arizona

Light Bills Cut

THE state corporation commission recently announced a reduction of about $90,000, effective May 1st, on the annual electric bills of consumers served by the Central Arizona Light & Power Company in Phoenix and Salt river valley communities.

The residential schedule is as follows: Two cents per day and 3.3 cents per kilowatt hour for the first 120 kilowatt hours; 2.5 cents per kilowatt hour for the next 130 kilowatt hours; and 2 cents per kilowatt hour for all additional, plus tax.

The new commercial light and power schedule: Six dollars for the first 3 kilowatts plus $1.65 per kilowatt of demand over 3 kilowatts and 2.5 cents per kilowatt hour for the first 90 kilowatt hours per kilowatt of demand; 2 cents per kilowatt hour for the next 3,200 kilowatt hours; and 1 cent per kilowatt hour for all additional, plus tax.

Arkansas

Asked to Reduce Rates

DESCRIBING the Arkansas Power & Light Company's commercial electric rates as "excessive and discriminatory," the state utilities commission on April 30th issued an order requesting the company to appear on May 19th to show cause why the rates should not be reduced $350,000 a year, pending final determination of a rate base and expenses.

The order followed a series of conferences on April 29th. It said the company sought to defer action until demand meters were installed, so that information from the meters could be studied. Several additional months would be required. The order said company representatives already had discussed the meters and studies for eighteen months.

The order said that a comparison of rates in other states showed Arkansas Power & Light commercial rates to be "greatly out of line" with rates charged by other companies.

The order said a fuel rate to the company recently was reduced, effecting a "substantial reduction" in its operating expenses, and that the company probably is earning "more than a fair return."

The reduction would be "in the nature of a percentage reduction of present rates or of such other nature as may then be found best."

A dissent to the order was filed by Commissioner A. B. Hill, who disagreed with Chairman Ben E. Carter and Commissioner H. W. Blalock regarding plans for a percentage reduction. Mr. Hill said he had no objection to immediate action toward effecting a reduction, but opposed the percentage plan as unsound in principle. A straight per cent reduction, he said, would pass a reduction on to certain consumers not entitled to it, and might require an upward rate revision for certain customers when the rate basis had been definitely established.

Rural Service Areas Defined

AN order defining rural service areas of the North Arkansas Electric Coöperative, Inc., the Arkansas-Missouri Power Corporation, and the Arkansas Power & Light Company was issued by the state utilities commission last month.

The coöperative, which on March 12th had been granted permission to build and maintain 180 miles of power line, costing $146,000, to serve 390 customers, will operate in the north-

ern, eastern, and southern parts of Baxter county, northeastern Fulton county, and southeastern and western Sharp county.

Arkansas-Missouri was granted a certificate to construct and maintain rural lines "around" the towns of Mammoth Spring and Ash Flat, and in certain parts of Fulton county.

The right to serve large power and industrial customers in the cooperative's areas was held open, except in and around the Norfork dam site, where it is reserved to the Arkansas Power & Light Company.

Reduced Gas Rate Schedule

A NEW rate schedule, under which large industrial consumers in cities and towns served by the Arkansas Louisiana Gas Company would save approximately $136,000 a year, was filed with the state utilities commission last month.

The commission announced that the schedule, "designed to favor the industrial development of Arkansas," had been negotiated for several weeks by Commissioner A. B. Hill, Chief Engineer J. E. Flanders, and company officials. The commission said the rate would make it certain that large industrial consumers in the state of Arkansas have as cheap a rate for gas as is available for any industry in that part of the country, except possibly industries located in the middle of a large gas field.

The schedule would apply to Arkansas Louisiana's entire transmission system in the state. It is designed for customers using more than 3,750,000 cubic feet per month and as much as 100,000,000 cubic feet per year. If annual consumption exceeds 300,000,000 cubic feet, the cost would be 8.75 cents per thousand cubic feet.

In some instances, it was said, Arkansas Louisiana rates would be lower than those made effective by the Louisiana-Nevada Transit Company in southwest Arkansas last year.

California

Gas Company Budgets Soar

BUDGET requirements of the Southern California Gas Company and Southern Counties Gas Company in the current calendar year will exceed $11,000,000, the largest annual budget drawn up since the early twenties, F. S. Wade, president of both companies, announced recently.

This huge expenditure for main and service extensions, new meters, pipe and gas storage installations to strengthen the natural gas transmission and distribution systems, and for an extensive program of building construction, is indicative of boom conditions now prevailing in southern California, particularly in the home building industry, it was said.

The annual rate of growth during the year 1940 was exceeded only twice before in the history of the gas business in southern California, and it is expected, on the basis of building activity in the first three months of this year, that the growth in 1941 will be as great, if not greater, than in the preceding year, Mr. Wade declared. Last year the two companies gained more than 48,000 meters.

The Southern California Gas Company budget, which aggregates $8,950,000, contemplates an increase of at least 35,000 meters during the year, of which $2,700,000 would be required for the necessary main and service extensions and meter assemblies to take care of this new business.

Hetch Hetchy Hearings

SECRETARY of the Interior Harold L. Ickes last month announced that public hearings would be held before final decision would be made as to whether a proposed contract between San Francisco and the Pacific Gas and Electric Company for the distribution to municipal consumers of electric energy from the Hetch Hetchy project constitutes compliance with the requirements of the Raker Act. Hearings were set for May 21st.

The Secretary's announcement was outlined in a letter sent to Mayor Angelo J. Rossi, of San Francisco, dated April 22, 1941. Ickes said that upon detailed analysis of the proposed arrangement submitted to him on March 12th for approval, he was not satisfied that it constituted substantial compliance "in good faith with the letter and spirit of the Raker Act, as construed by the Supreme Court of the United States. . . . In these circumstances I propose to hold an open hearing at which the views of representatives of the city and of all other interested parties regarding the proposed lease may be presented."

Georgia

Wage Pact Signed

OFFICIALS of the Georgia Power Company and the International Brotherhood of Electrical Workers (AFL) on May 1st signed an agreement calling for $175,000 in pay increases for 2,000 electrical workers.

Local unions in Atlanta, Athens, Augusta,

Columbus, Macon, and Rome were affected by the agreement, which was retroactive to March 1st, when the previous agreement expired.

The contract is for a 2-year period, but provides wage negotiations can be reopened at the end of one year. Included in the total wage increase, which is a general 5 per cent raise, are wage adjustments of $25,000 a year.

P. S. Arkwright, president of the power company, said the utility's electrical workers would receive approximately $3,250,000 in wages in 1941. About 2,000 will participate in the payroll. Nearly 1,500 are members of the IBEW.

Arkwright asserted the agreement recognized the IBEW as sole bargaining agent for the electrical workers and all provisions affecting hours of work, rates of pay, and working conditions apply to union and non-union employees alike.

Illinois

Ask Reconsideration of Ruling

THE state commerce commission and two power companies petitioned the state supreme court last month for a reconsideration of its far-reaching decision giving cities the right to order removal of public utility property from city streets when franchises expire.

The petition for rehearing was filed by Attorney General George F. Barrett in behalf of the state commission. The Illinois Northern Utilities Company, and the Central Illinois Electric & Gas Company would have to cease operation in the villages of Geneseo and Heyworth under terms of the court order.

In its opinion the supreme court reversed its previous decision of several years ago. The recent opinion held that municipalities, and not the state commerce commission, have jurisdiction over city streets and have authority to order removal of utilities' property such as power lines and poles when franchises expire.

Indiana

Consolidation Delayed

LEGAL technicalities recently delayed action on proposed consolidation of three Indiana utility companies by preventing appearance of a quorum at meetings of their stockholders.

Stockholders' meetings of the Public Service Company of Indiana, the Central Indiana Power Company, and the Terre Haute Electric Company, Inc., were to have been held separately at various times on April 30th. These meetings were to act on consolidation proposals. They were postponed to May 21st when each revealed lack of a quorum.

Quorums were lacking because the status of Midland United Company, beneficial owner of more than half the outstanding voting shares of these corporations, was in process of reorganization in the Delaware Federal district. A hearing was scheduled to be held May 12th. At that time the court was expected to instruct the trustee regarding voting of the stock with respect to the proposed consolidation. Until that time, it would be pointless for representatives of the controlling Midland concern to attend either of the three stockholders' meetings, it was said.

Tax Cut Offered

THE state board of tax commissioners recently informed 44 cities and towns in Indiana operating municipal utilities that they could settle their delinquent tax bills on a 40 per cent basis before promulgation of the acts of the 1941 state legislature.

After the new laws become effective, such adjustments cannot be made. The delinquencies piled up before the 1939 session of the legislature exempted municipal utilities from payment of all except gross income taxes.

Estimates of the delinquent total ran from $200,000 to $250,000. Some dissatisfaction with the arrangement was reported among cities and towns which have no delinquencies and townships, counties, and other governmental units which would share in the funds accruing from the delinquent payments.

Maryland

Electric Rates Cut

EASTERN Shore and southern Maryland customers of the Eastern Shore Public Service system will get an electric rate reduction of approximately $100,000 a year as the result of negotiations concluded late last month, the state public service commission announced.

Total reduction for the nine counties of the Eastern Shore will amount to $77,000, while

in more thinly settled southern Maryland the saving will aggregate $23,000.

In a separate announcement, Lewis Payne, president of the Eastern Shore Public Service Company of Maryland, said that still another reduction, amounting altogether to $32,000, was being extended voluntarily to customers of the company's Delaware affiliate. This will affect residents of Kent and Sussex counties, Delaware. The Delaware corporation, the Eastern Shore Public Service Company, is not under any form of state regulation, since Delaware has no utility commission.

Commission Chairman Named

STEUART Purcell, associate member of the state public service commission, on May 1st was named its chairman by Governor O'Conor. He succeeded former Senator O. E. Weller, whose term expired on May 5th. Commissioner Purcell's place would be filled by Senator Arthur H. Brice, of Kent county, president of the state senate.

Formerly chief engineer of Baltimore, Mr. Purcell was appointed a member of the state commission in August, 1927, by the late Governor Ritchie, succeeding Ezra B. Whitman, present chairman of the State Roads Commission. He qualified as a member of the public service commission on September 1, 1927, and was reappointed by Governor O'Conor in April, 1939.

Senator Brice, keystone of the administration forces in the state general assembly for the last four years, was mentioned as a possible appointee to the chairmanship of the commission early last month. In announcing the appointments, Governor O'Conor said "Senator Brice combines the rare qualities of sound judgment, judicial temperament, and a zeal for public service."

Missouri

Water Bill Killed

THE much criticized bill to permit the county court of St. Louis county to purchase the County Water Company, abandoned several weeks ago by its legislative sponsor, State Senator Joseph A. Falzone of Clayton, under pressure of widespread opposition, was killed on May 1st by the senate committee on county courts and township organizations.

In accordance with senate practice, the bill would not be reported adversely by the committee until the last day of the session, despite Senator Falzone's request to the committee on May 1st that the bill be immediately reported with a recommendation that it do not pass.

The measure was dropped by Falzone after it was sharply criticized for giving the county court sweeping powers to purchase and operate the water company without approval of the voters.

Senator Falzone recently stated he would have nothing more to do with the matter and would not handle a water bill of any kind.

Commission Bill Perfected

THE state house last month perfected a bill for election, rather than appointment, of state public service commission members. There was no explanation of the bill and it was said a number of the members indicated vocally they did not know what they had voted on.

The bill would require that the five members of the state commission, now appointed by the governor for 6-year terms, be elected. The measure was called up for perfection just before adjournment on April 21st by its author, Representative J. Arthur Francis, Democrat of Iron county.

At the time the bill was acted on, the house was said to have been operating without a legal quorum. The vote on the bill—by members standing—was 34 for the bill and 18 against, a total of 2 more than a bare one-third of the house membership of 150.

Nebraska

Oppose Power Legislation

OPPOSITION to existing power legislation was voiced by the members of the Nebraska Association of Rural Public Power Districts at their recent midannual meeting at Lincoln.

They adopted a resolution expressing their views on bills before the state unicameral. LB 72, which proposes taxation of the public power and irrigation districts, was one of those meeting with disfavor of the organization. Others, then on file, were LB 408 and LB 480.

The unicameral subsequently rejected LB 72. Considered one of the major bills of the 1941 session, the tax amendment was postponed indefinitely on general file by a vote of 19 to 11. The measure would have placed on the tax rolls property already acquired by the districts which had been taxable, future acquired property, and purchased municipal utilities.

Municipal Rates Reduced

MUNICIPAL power rate reductions totaling $30,068, effective as of June 1st, were ap-

proved by the Lincoln city council on April 28th. The price cuttings were prepared by the city engineers upon study of operating data on the municipal plant, and gave the following reductions in electric rates: Residential, $20,290; commercial, $3,969; school and government, $782; water pumping, $3,245; and street lighting, $1,782.

Residential service which is available to one-family residences or their equivalent for all lighting, cooking, heating, refrigeration, household appliances, and small single-phase utility motors, will be sold for 3.5 cents net per kilowatt hour for the first 32 kilowatt hours used per month in excess of the use included in the minimum monthly bill.

The new charges are all computed on a net basis and have no provision for discount or penalty.

Rates for large commercial and industrial consumers are to be fixed by individual contract between the consumer and the city light department as under the present system. Electric service to public buildings will be set at a uniform charge of 2 cents net per kilowatt hour.

New York

Transit Rehiring Bill Vetoed

AT the request of Mayor LaGuardia of New York city, Governor Lehman on April 27th vetoed the Crews bill (Assembly No. 1407), ordering the reinstatement into jobs in the unified transit system of former employees who had not taken out citizenship papers prior to December 19, 1939, when the Wicks Civil Service Bill went into effect, but who have done so since.

The mayor told the governor that ample time had been allowed to all workers to take out their first papers, and that in addition the bill would make the board of transportation take back all employees of the privately operated B-MT and IRT if they had taken the steps toward citizenship, thus saddling the board with an indefinite number of men for which it had no need.

Rehearing Denied

THE state public service commission last month denied the petition of the Long Beach Gas Company, subsidiary of Long Island Lighting Company, for a rehearing relative to the state agency's order of March 19th requiring the utility to make write-offs and corrections on its books and accounts totaling $109,400.

The commission found in its order that Long Beach Gas had improperly charged $76,000 to capital as a result of an investigation into original cost of the utility's property. In its order the commission refused to permit the company to charge, among other items, a fee of $9,706 paid to E. L. Phillips & Co., service organization for the Long Island Lighting system personally owned by Ellis L. Phillips, chairman of the system, for engineering and management work.

While acknowledging that the sum involved, in refusing to authorize this engineering and management fee, was small, the commission pointed out that its action had far-reaching importance as similar items, but in substantial amounts, figure in a number of other cases concerning original cost of property of other Long Island Lighting subsidiaries.

Ohio

Franchise Negotiations Terminated

THE Cleveland city council on April 28th terminated franchise negotiations with the Cleveland Railway Company and voted to proceed toward municipal traction ownership. The council killed a company-sponsored franchise ordinance that had been the sole basis of negotiations since last October and then, by acclamation, authorized Mayor Edward Blythin to ascertain the terms on which the railway would be willing to sell its system to the city.

Blythin, for whom the council actions represented a sweeping political victory, said he would make a formal request for those terms.

The company's board of directors had previously set a sale price in excess of $24,000,000, a figure known to be unacceptable to the council and the Blythin administration, it was said.

If the city government buys the railway company it should borrow, in addition to the money needed for the purchase, around $2,000,000 for modernization of the traction system, Mayor Blythin said. The mayor remarked that he thought $2,000,000 would "get us well started on the modernizing and improving of mass transportation service." He said he believed the city would have no trouble in obtaining it over and above the financing of the purchase of the system at a satisfactory price.

In the event of municipal purchase of the Cleveland Railway Company, Councilman Emil Crown advocates that the city electorate be given a chance to vote on a charter amendment to establish an independent commission

that would administer not only the railway but also other city-owned utilities—the municipal light plant, the waterworks, and the sewage disposal system. Crown, one of the leading advocates of municipal traction ownership, said he believed the amendment could be so drawn as to have "virtually fool-proof" provisions against political manipulation of the utilities.

He said he would recommend that such an amendment provide for the hiring by the commission of an able, experienced utility executive to be general manager of the city-owned public service institutions and that he be paid $12,000 to $15,000.

Oklahoma

Appeal Measure Signed

A BILL to prevent public utilities from throwing rate cases into Federal District Court became law with Governor Phillips' signature on April 23rd. The measure vitalizes the Johnson Act of Congress which permits states to fix the procedure in rate case appeals.

The bill provides for appeals from the state corporation commission to the state supreme court.

Proponents argue it will prevent utilities going into Federal court to delay rate cases and take jurisdiction from the state.

Oregon

Utility Cuts Rates

CUSTOMERS of the Pacific Power & Light Company in Oregon and Washington will save approximately $410,000 a year as the result of electric rate reductions announced at Salem, Oregon, by Ormond R. Bean, state utilities commissioner. The reduced rates are effective May 22nd.

Company officials characterized the new schedules as representing a major step toward attainment of the Bonneville rate objective by a private utility. The reduction was the largest of three system-wide cuts totaling more than $1,000,000 announced by the company since 1936.

County PUD Beaten

Although the area has fewer than 12,000 eligible voters, considerable significance attaches to the defeat of the Clatsop County Public Utility District proposal at the May 6th election. The final count showed the district beaten 3,015 to 2,824, on about a 50 per cent voter turnout, with all incorporated towns in the county opposed to the public ownership plan.

The significance of the outcome is that public ownership forces concentrated on the county for nearly two months. Bonneville Administration agents were especially active, according to *The Wall Street Journal.*

Pennsylvania

Commission Grants Request

THE state public utility commission last month granted the request of the Edison Light & Power Company, of York, that it be permitted to declare and pay a dividend of $73,180 to York Railways Company, an affiliate, and in addition to pay to the railway company $31,570 for accumulated unpaid interest on indebtedness.

The money would be used to pay the semi-annual interest due June 1st on York Railways Company's bonds, and $13,425 would be returned to Edison Light & Power in the form of interest on the railway company's bonds held by the Edison Company.

On May 23, 1939, the commission issued an order prohibiting payment of dividends by Edison Light & Power pending further commission order.

South Carolina

REA Votes Line Transfer

THE state Rural Electrification Authority, which with Federal funds constructed approximately 2,400 miles of rural lines in South Carolina, last month was reduced to an agency with an unfinished refrigeration plant, the power system in the town of Moncks Corner, and 8 miles of rural lines in Hampton county.

Title to all the other lines built by the agency

has now been formally given to the several county coöperative electric associations in the state. The lines will be tied in with additional lines constructed, being constructed, or to be constructed, by the co-ops, and the state REA will no longer serve as the medium for the construction of federally financed lines in the state.

This change of title was brought about by an act passed at the 1940 session of the state general assembly. Remaining funds of the REA, $140,000, will be disposed of as follows:

The sum of $25,000 would be reserved by the authority for the repayment to the state of South Carolina of funds it provided back in the days when the authority was established, and for various expenses connected with the transfer of the lines to the coöperatives. The bulk of the money was to reimburse the state.

A sum of between $90,000 and $100,000 would go back to the Federal government, to be applied against debts to the government for lines in the state.

The sum of $11,500 in the REA treasury would go to the various coöperatives, this being money the REA collected while operating the lines pending the time some of the coöperatives took them over actively.

Washington

Executes Bonneville Contract

THE Cowlitz County Public Utility District on April 28th became the eleventh PUD to execute a contract with Bonneville Power Administrator Paul J. Raver for the purchase of Columbia river power. The Cowlitz District's contract for 3,000 kilowatts brought the administration's power sales to a total of 301,830 kilowatts—58 per cent of the total ultimate output of Bonneville dam.

The district was reported to be the twenty-ninth publicly owned power distribution agency to purchase government-generated electricity.

Administrator Raver said he would be ready to begin delivery of power during the summer upon completion of a 35-mile transmission line now under construction from the government's power substation at Chehalis, Washington. The line will serve both the PUD and the new Reynolds Metals Company aluminum plant now under construction at Longview.

The recent agreement covered an effective period of one year. Present plans call for execution of a long-term contract, probably for twenty years, for the purchase of power requirements as soon as the district has completed its system acquisition.

Wisconsin

Assumes Natural Gas Jurisdiction

THE state public service commission last month announced it had assumed jurisdiction over natural gas companies and would set hearings to consider applications for authority to serve Wisconsin cities.

The commission pointed out that the "proposals of natural gas companies embrace a question of tremendous public importance," suggesting that the matter should receive "study and consideration by the lawfully constituted agencies of the state before action is taken either to admit or to exclude natural gas for public distribution or consumption.

The next step to be taken by the commission would be the holding of hearings to determine whether applications for authority to bring natural gas into Wisconsin should be granted or denied.

One question facing the commission was whether natural gas companies were public utilities. The commission ruled that the applicants are natural gas companies within the purview of the Federal Natural Gas Act and by that act are charged with the obligations of public utilities.

The commission promised "a thorough investigation" of the effects of the possible introduction of natural gas into the state. "We will consider the effect of the proposals of service, the cost thereof, relative desirability of natural gas as compared with manufactured gas, and the general economic consequences," the commission declared.

Plan Utility Tax Cut

PROPOSED reduction of utility company taxes to save rural electric customers approximately $300,000 a year went unopposed at a state assembly agriculture committee hearing recently.

A measure by Assemblyman Walter E. Cook, Republican of Unity, would replace the present ad valorem tax on lines and equipment used directly for rural service, with 3 per cent tax on the gross income from the sale of power to farm customers. On all other lines and equipment the utilities, whether municipal or private companies, would continue to pay present taxes.

The Latest Utility Rulings

Tax Clause in Rate Schedule Disapproved

THE Lawrence Gas & Electric Company, anticipating increased taxes, filed with the Massachusetts department a schedule of gas rates containing a clause providing that charges should be automatically increased or decreased by a percentage equal to one-tenth of one per cent for each one-tenth of change in the currently estimated tax burden of 19 cents for each dollar of gas operating revenue.

The department shared with the company the expectation that substantial tax increases would come, which must be reckoned with in rate cases, but it was reluctant to attempt a solution of the tax problem by recourse to a tax clause. It was said:

> The approval of a tax clause is tantamount to the granting of a rate increase. A tax clause as proposed gives the company the opportunity to charge its customers the increased taxes without striving to meet them either by effecting operating economies or increasing revenues by increased sales. It removes the incentive which the company otherwise has to seek tax reductions. It involves in its application certain elements or factors which do not permit direct and certain computation of charges.

The department concluded that the public interest would be better served by disapproval of tax clauses than by their adoption at the present time. It was said that if revenue increases become necessary because of increases in taxes, then the matter may be considered after the company files revised rates to which the department may give its attention. *Re Lawrence Gas & Electric Co. (DPU 6145).*

Corporation Acquiring Its Stock Required To Furnish Information

A DECLARATION by the Engineers Public Service Company regarding the acquisition and retirement of its own preferred stock was permitted by the Securities and Exchange Commission to become effective subject to conditions relating to the furnishing of information for stockholders. The company appeared to have ample funds on hand to meet its current needs and the needs of its subsidiary companies. It had received the redemption price of shares of another company, and it urged that having given up a high dividend preferred stock investment it should equalize by reducing the requirements on its own preferred stock.

From an examination of the financial statement submitted, the commission was of the opinion that the acquisition would not be detrimental to the financial integrity of the companies in the holding company system and that no adverse order was required to safeguard the working capital of public utility companies in the system.

Taking up the question of fairness to stockholders, the commission pointed out that the volume of trading in this company's preferred stock had not been heavy, but it was substantial enough to indicate that certain holders were willing to dispose of the stock. The commission continued:

> . . . when the issuer of securities is in the open market as a purchaser or seeks to pur-

chase directly from the holders on tender, it is important that information be made available to holders so that they may form an intelligent judgment of the worth of the securities in relation to the offer to buy. This matter of disclosure is particularly important when, as is here the case, the question of holding or selling is one which must be resolved against circumstances presently confronting the system as a whole.

This company is involved in proceedings under § 11 of the Holding Company Act, and security holders would be interested in the outcome of the proceedings and in the consequences to them of compliance by the system with any order which the commission might issue. The commission said that there were presently available statistical data which had been assembled and correlated by statistical houses of general repute which would bear directly on the pure investment questions which security holders faced. The commission quoted from "Standard Outlook for the Security Markets" published by Standard Statistics, from PUBLIC UTILITIES FORTNIGHTLY, issue of March 13th, and from Moody's Stock Survey of March 31st. The condition was imposed that a copy of the findings and opinion containing these references be enclosed in any letter or communication sent to the preferred stockholders in connection with this acquisition. *Re Engineers Public Service Co. (File No. 70-248, Release No. 2699).*

Agreements between Affiliates for Promotion Of Appliance Sales

ELECTRIC and gas companies, according to a ruling of the Pennsylvania commission, have the incidental power to discount conditional sales contracts covering appliances sold to their customers. Agreements providing for distribution to an affiliated sales company of orders for appliances and equipment taken by salesmen of utility companies are not, however, necessary or proper for the service, accommodation, convenience, or safety of the public.

The views of the commission were announced in a proceeding in which an application for approval of agreements between electric and gas utilities and an affiliated sales company were presented for approval. The right of a gas or electric company to engage in merchandising activities as an implied or incidental power under its charter was recognized, and the commission said it was constrained in view of judicial decisions to hold that such utility companies have the incidental power to discount conditional sales contracts assigned to it by an affiliated merchandising company. Approval of an agreement covering such transactions was granted upon a showing that the utilities would secure a return adequate to provide the entire cost of handling the account, plus a return on investment.

Agreements providing for the distribution to the sales company of orders for appliances and equipment taken by salesmen of the utility company were disapproved, with the statement:

> Whether or not Light Company or Gas Company engages in the sale of appliances is a matter for each company to determine, but, in our opinion, if they elect to do so, they should engage in such activities directly, not indirectly. They should not expend large sums of money which are charged to operating expenses, and therefore ultimately borne by their consumers, for the solicitation of orders for appliances for the benefit of an affiliated company. While we fully recognize that the sale of load-building appliances will increase to some extent the consumption of electricity and gas, yet it is manifestly unfair to the utilities and their consumers that they should bear the brunt of the expense of selling appliances without participating in the gross profits of sales. In our opinion the greater portion of the benefits to be derived from the agreements will inure to Sales Company at the expense of the consumers of Light Company and Gas Company, which is incompatible with the semipublic nature of the utility business of Light Company and Gas Company.

Re Duquesne Light Co. et al. (Application Docket Nos. 32366, Folder 2, 58906, 58907).

Conditions of Approval of Stock Issue by Subsidiary for Expansion Purposes

THE Securities and Exchange Commission permitted declarations by a subsidiary electric company for the issuance of additional stock for expansion of generating facilities to become effective upon finding that the securities qualified under § 7 of the Holding Company Act. Acquisition of stock of the subsidiary by an intermediate holding company was also approved, the commission ruling that the intermediate holding rather than a top holding company was the proper company to acquire the stock.

The issuing company was the Monongahela West Penn Public Service Company, operating in West Virginia. Part of its stock is held by the top holding company, American Water Works & Electric Company, while other stock is owned by the West Penn Power Company, which is an indirect subsidiary of American Water Works & Electric Company, approximately 65 per cent of its common stock being owned by the West Penn Electric Company (the intermediate holding company) and 30 per cent by West Penn Railways Company, which in turn is a wholly owned subsidiary of West Penn Electric.

The commission, after explaining what attempts had been made to simplify the holding company system under § 11 of the Holding Company Act, concluded that the transfer of Monongahela stock to West Penn Electric appeared to be a logical step in the direction of simplification under § 11. The commission continued:

> With respect to the Monongahela stock presently proposed to be issued, it therefore appears that this stock should be acquired by West Penn Electric Company, since that company is the one which will presumably be the ultimate owner of the remaining Monongahela stock. It is true that the acquisition of Monongahela stock by West Penn Electric at the present time will result in the stock being owned by three different companies, American Water Works, West Penn Power, and West Penn Electric. However, the solution for terminating such ownership would appear to be the acquisition by West Penn Electric not only of the new stock proposed to be issued, but also the stock now owned by American Water Works.
>
> In addition, of course, it has been represented both to us and to the Pennsylvania commission that West Penn Electric will acquire the balance of the Monongahela stock now owned by West Penn Power. It is therefore apparent that since West Penn Electric is the proper holding company to own this stock, an acquisition by that company would be in the public interest as a first step in the right direction.

The debt ratio question was also involved in this case. The commission approved the issuance of stock because the present debt aggregated approximately 58 per cent of total capitalization, and of the remainder 13.7 per cent represented preferred stock, and 28.3 per cent common stock and surplus. On a basis adjusted to reflect a proposed write-down of assets and capital and the proposed additional stock issue, the respective capitalization ratios would be approximately 68 per cent for debt, 16 per cent for preferred stock, and 16 per cent for common stock. *Re Monongahela West Penn Public Service Co. et al. (File No. 70–253, Release No. 2663).*

Authority of Power Commission to Direct Eliminations from Accounts

THE circuit court of appeals, seventh circuit, in reviewing an order of the Federal Power Commission, in a proceeding to determine the actual legitimate original cost of a federally licensed power project, held that the commission had authority to direct elimination of items found not to constitute real assets and to establish uniform accounting. The question whether these particular items were

properly excluded from actual legitimate original cost was not involved, but the company contended that the commission had no power to direct that items of cost admittedly not a part of net investment should be stricken from its books of account.

One of the arguments was that the order was wholly unnecessary at the present time, for the reason that the conditions making it desirable or necessary that the government ascertain the cost had not yet arisen. The commission agreed with Clarion River Power Co. *v.* Smith, 61 App DC 186, PUR 1932E 149, 59 F(2d) 861, that an interpretation of the act so as to extend indefinitely the time for action by the commission would be unreasonable. The court ruled that the act contemplated an exercise of constant regulatory power by the commission.

It was also urged that to enforce this portion of the order would be to infringe upon the jurisdiction of the Wisconsin commission, which, in fixing rates, determines values. The court, however, ruled that the order was in no wise binding upon the state commission, that the accounting prescribed by the Federal commission did not preclude accounting regulation by the state body, and that each commission was empowered to act within its own field.

Moreover, the court held, the order did not invade the field of management, as it merely carried to completion the statutory duty of finding the cost of construction by directing the company to enter upon its books the determined cost. This, said the court, was not management but was regulation contemplated by the act. The final ruling was made that the company had not made out a case of confiscation contrary to its constitutional rights, since the order worked no deprivation of property, but merely directed that the record should accord with the facts. *Northern States Power Co. v. Federal Power Commission, 118 F(2d) 141.*

Power to Deny Operating Authority to Municipal Plant

THE Wisconsin commission, in affirming a former order granting a certificate of convenience and necessity to a municipality for the construction of a water plant, considered the question whether the commission has authority to deny an application made by a village and whether the commission has authority to reopen a docket after a certificate has been issued. It was ruled that the commission had authority to refuse a certificate and that it could not disturb its order, opinion, and certificate previously issued.

The section under which the commission grants a certificate relates to all public utilities and does not attempt to distinguish between municipally and privately owned utilities.

Concerning this statute, the commission said:

> The municipality engages in public utility activities in its proprietary and not in its governmental capacity. If § 196.49 (1) does not permit the commission to refuse to issue a certificate, it is meaningless. There has been no contention that the commission has no authority to refuse a certificate to a privately owned utility. Since municipally owned and privately owned utilities stand on an equal footing before the commission, it follows that the commission may grant or refuse a certificate to the municipally owned utility as the facts and circumstances warrant.

Reference was made to an opinion of the attorney general to the effect that if the period for rehearing has expired and if parties have acted upon a determination of the commission, the commission affects the status of the parties with reference to the subject matter by reconsidering its action. It was said that the attorney general had properly distinguished between orders of the commission which had a continuing effect, such as (a) those which would prescribe a certain level of rates for the future, and (b) determinations of the commission of a quasi

judicial nature which when made fixed the rights or authority of the parties before the commission and constitute but a single and not a continuing function.

It was ruled that after the commission has once determined that public convenience and necessity permit a village to engage in business as a public utility, a certificate has issued, and the time for rehearing and appeal has expired, the condition laid down by the statute has been fully met and the village has obtained an indefeasible right to engage in the business. *Re Village of Arena (CA–1513).*

Business Telephone Classification

THE Idaho commission, after investigation of a telephone patron's classification, ruled that he should be classified as a business subscriber instead of a residential subscriber. He had been using a residential telephone on his farm and had built up a successful dairy business, sufficiently important that he was advertising the same as "Sanitary Dairy." It was said to be evident that he was using service for a business purpose.

All telephone companies, said the commission, are required to make a rate for subscribers in accord with the use and cost of the service. A telephone company may charge a higher rate for business service than for simple residential service. The classification, it was said, depends almost wholly on the use made of the phone by the subscriber or customer. The commission continued:

> Courts have held almost without deviation in decisions that where doctors, lawyers, dentists, photographers, dressmakers, and the like using their residences for calling and for being called are business phones and should be so classified. . . .
>
> The testimony here shows that while the user may not intend to use to any great extent the resident phone to build up his Sanitary Dairy, that he has used the same sometimes two or three times a day in answering calls touching his milk or dairy business.

Hall v. Interstate Telephone Co. (Case No. F–1237, Order No. 1747).

Other Important Rulings

THE California commission held that when rates are voluntarily reduced it does not follow that reparation should be awarded on shipments made prior to the reduced rates. *Rosenberg Bros. & Co. v. Southern P. Co. (Decision No. 33866, Case No. 4498).*

Actual operation is, in the opinion of the California commission, an essential ingredient of an operative right and where such operation ceases without authority, the operative right becomes impaired to such a degree that it may no longer be the subject of transfer. *Re Hawkins (Decision No. 33872, Application No. 23593).*

The United States Court of Appeals for the District of Columbia held that it does not have jurisdiction to grant a stay of an order of the Federal Communications Commission authorizing a radio station to modify its facilities, pending appeal from such order by an existing station. *Scripps-Howard Radio v. Federal Communications Commission.*

The court of civil appeals of Texas held that the commission has no jurisdiction to grant a certificate to operate over unconstructed projected public highways. *Southwestern Greyhound Lines v. Railroad Commission, 147 SW(2d) 318.*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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VOLUME 38 PUR(NS) NUMBER 1

Points of Special Interest

Titles and Index

TITLES

INDEX

PUBLIC UTILITIES REPORTS

NEW YORK DEPARTMENT OF PUBLIC SERVICE, STATE DIVISION, PUBLIC SERVICE COMMISSION

Re Long Beach Gas Company, Incorporated

[Case No. 10198.]

Accounting, § 37 — Preliminary engineering expenses — Organization expense.

1. Preliminary engineering expense for the purpose of ascertaining the amount and character of a gas distribution system is not an organization expense, p. 6.

Accounting, § 37 — Work in connection with extensions — Work relating to purchases — Organization expense.

2. Work in connection with extensions and the purchase of gas mains is no part of organization expense, but, if it is to be included anywhere, it should be included under engineering, p. 6.

Accounting, § 23 — Franchise expense — Conferences with municipal officers.

3. Expenses relating to conferences with officers of a village and having to do with franchises or consents are not chargeable to organization expense, p. 6.

Accounting, § 30.1 — Circulars — Business promotion — Organization expense.

4. Expense in connection with preparing and distributing circulars to interest people in the use of gas is an operating expense and not a capital charge to be included in organization expense, p. 6.

Accounting, § 17.1 — Corporation expense — Certificate — Change in directors.

5. A charge for preparing a certificate of increase in the number of directors is not an organization expense, p. 6.

Accounting, § 7.6 — Operating expense account — Relation of expense to past period.

6. An expense relating to a past period cannot be charged as an operating expense, although if it were presently incurred it might be so charged, p. 6.

Accounting, § 56 — Revisions — Charges to surplus — Item disallowed as organization.

7. An item claimed as organization expense but disallowed as not representing organization expenses must be charged to surplus when it is not properly chargeable to gas plant acquisition adjustments because it did not arise from this source, p. 6.

Accounting, § 33 — Rentals.

8. Rentals paid prior to the date of acquisition of property are not capital charges and should be excluded from property account, p. 9.

Accounting, § 7 — Unsupported items.

9. An item having no support and representing nothing the company now possesses of value should be eliminated from property account and charged to surplus, p. 9.

Accounting, § 31 — Property for future use.

10. An expenditure for services laid in anticipation of a real estate development but not used and useful should not be included in the account for gas plant acquisition adjustments, particularly where it is not known whether the services are any longer in existence, p. 10.

Accounting, § 13 — Property no longer in existence.

11. Book cost of property no longer in existence and meter installations and general equipment not inventoried should not be included in the plant acquisition adjustment account, p. 10.

Accounting, § 12.1 — Appraisal expense.

12. An expenditure for appraisal of a holder site after purchase should not be charged to land account as such an item should be written off, when incurred, through operating expenses, p. 10.

Accounting, § 13 — Relocation of property.

13. The expense of relocation of property is an operating expense and should be excluded from an acquisition adjustment account, p. 10.

Accounting, § 17.1 — Directors' fees.

14. Directors' fees are operating expenses and not proper capital charges, p. 10.

Accounting, § 56 — Revisions — Charges to surplus — Item relating to property no longer in existence — Inadequacy of depreciation reserve.

15. Expenditures relating to property no longer in existence, and therefore excluded from the acquisition adjustment account, should be charged to surplus account in the absence of an adequate depreciation reserve, p. 12.

Accounting, § 31 — Property partially used.

16. Property which is only partially used and useful in utility operations and which is of such a nature that the portion so used is not separable from the portion which is not so used may, for accounting purposes, be included in the account for plant in service, p. 13.

Accounting, § 19 — Property paid for by consumers.

17. The original cost of property paid for by consumers which is being used to render gas service may be included in the account "Gas Plant in Service," provided an offsetting liability account is established which will

show the source of the funds obtained which the company itself did not provide, p. 14.

Accounting, § 13 — Services on private property.

18. The cost of services installed by a gas company on private property may be included in the account "Gas Plant in Service," although the company may not own the services, p. 14.

Accounting, § 56 — Revisions — Deferred debits of past years.

19. Deferred debits incurred more than twenty years ago should be eliminated from the balance sheet by a charge to surplus, p. 15.

Accounting, § 56 — Revisions — Charges amortized without authority.

20. A deferred debit representing a part of costs incurred by a company in the past in connection with the inventory and appraisal of its property, which the company has been amortizing without the necessary approval of the Commission, should be charged off to surplus, p. 15.

Procedure, § 36 — Res adjudicata — Prior action on account.

21. Failure to require proper action on an accounting item in an earlier proceeding is not determinative of what should be done today, p. 16.

Accounting, § 56 — Retransfer of reserve — Depreciation.

22. The balance in a reserve for accrued amortization of capital, created out of charges to operating expenses, when transferred several years ago to surplus, should be returned to the reserve for depreciation, p. 16.

Accounting, § 56 — Revisions — Contributions in aid of construction — Transfer of item.

23. An item representing amounts collected by a gas company in connection with the installation of new mains and services, credited to merchandise and jobbing revenues contrary to the requirements of the uniform system of accounts, should be transferred to the account "Contributions in Aid of Construction," p. 16.

Intercorporate relations, § 15 — Payments to affiliates — Cost of service.

24. No charge for management, construction, engineering, or similar services made by an affiliated interest should exceed the reasonable cost of performing such services, under established law and under Public Service Law, § 110, Par. 3, p. 25.

Accounting, § 24.1 — Payments to affiliates.

25. A fee improperly paid by a gas company to an affiliate which is practically the construction department of a related utility system, should, when the cost of performing the service is not proven, be eliminated from original cost and be charged to surplus, p. 26.

Depreciation, § 5 — Powers of Commission — Adequacy of reserves.

26. The Commission does not consider that it has authority to compel a company to provide and maintain an adequate reserve, in view of decisions of the state courts, p. 28.

Accounting, § 4 — Jurisdiction of Commission — Original cost records.

27. The Commission has authority to require gas companies under its jurisdiction to determine original cost according to the definition of such cost as the cost to the person first devoting the property to public service, p. 29.

[March 19, 1941.]

NEW YORK DEPARTMENT OF PUBLIC SERVICE

PROCEEDING *on motion of Commission as to accounts and records of a gas company and as to original cost of property and existing depreciation; changes in accounts ordered.*

APPEARANCES: Gay H. Brown, Counsel (by George E. McVay, Assistant Counsel), for the Public Service Commission; Griggs, Baldwin and Baldwin (by Charles G. Blakeslee and E. J. Crummey), New York city, Attorneys, for Long Beach Gas Company, Inc.; M. John P. Jacobs, Brooklyn, Counsel, United Taxpayers of Long Beach, Inc.; John M. Mitchell, Mineola, Long Island, Deputy County Attorney, for the county of Nassau; Callaghan, Stout and Nova (by Stephen Callaghan and Thomas A. Gaffney), New York city, Special Counsel for Long Beach Gas Company.

MALTBIE, Chairman: This is a proceeding on motion of the Commission to inquire into the accounting methods of the Long Beach Gas Company, Inc., and to determine what, if any, changes should be made in accounts of that company to make them conform to the system of accounts prescribed by the Commission. It is one of a number of cases initiated by the Commission for the same purpose.

In compliance with an order requiring gas companies to establish continuing property records, often called "perpetual inventories," the company in 1936 started to inventory its property. In December, 1938, the company submitted journal entries which purported to place the plant accounts on the basis of original cost, classified according to the new system of accounts. The difference between the property account as it stood on December 31, 1937, and the original cost as determined by the company in connection with the preparation of its continuing property record was charged by the company to Account 105, Gas Plant Acquisition Adjustments.

The order instituting the present proceeding was adopted May 28, 1940, and on October 14, 1940, testimony was presented by the staff of the Commission in relation to proper book entries. On that date, Exhibit 1 was introduced by Francis T. Mylott, consulting accountant, setting forth the company's balance sheet as of January 1, 1938, and also showing various adjustments recommended. In summary form these are as follows:

RE LONG BEACH GAS CO., INC.

CASE NO. 10198—LONG BEACH GAS COMPANY, INC.

Table 1, Adjusted Balance Sheet, January 1, 1938

Assets	Per Books	Adjustments Debit	Adjustments Credit	Adjusted
Utility plant—gas				
Gas plant in service	$1,936,096.10	$66.00(1)	$89,700.12(2)	$1,846,461.98
Construction work in progress	17.69	.....	.....	17.69
Gas plant held for future use	.....	13,357.18(2)	.....	13,357.18
Gas plant acquisition adjustments	33,124.03	.....	33,124.03(3)	.....
Total utility plant	$1,969,237.82	$13,423.18	$122,824.15	$1,859,836.85
Investment and fund accounts	715.70	.....	.....	715.70
Current and accrued assets	76,590.62	.....	.....	76,590.62
Unamortized debt discount and expense	140,347.04	.....	90.96(4)	140,256.08
Other deferred debits	30,351.48	.....	30,351.48(5)	.....
Capital stock expense	9,782.85	719.32	719.32	9,782.85
Balance for further disposition	.....	42,535.83(3)	.....	42,535.83
Total	$2,227,025.51	$56,678.33	$153,985.91	$2,129,717.93
Liabilities				
Total capital stock	$422,500.00	.....	.....	$422,500.00
Long term debt	844,900.00	.....	.....	844,900.00
Advances from associated companies	999,230.50	.....	.....	999,230.50
Current and accrued liabilities	134,908.88	.....	.....	134,908.88
Customers' advances for construction	3,810.16	$916.09(6)	.....	2,894.07
Reserve for depreciation of gas plant	5,527.38	.....	$10,980.60(7)	16,507.98
Reserve for uncollectible accounts	10,716.48	.....	.....	10,716.48
Other reserves	1,955.13	.....	.....	1,955.13
Contributions in aid of construction	56,203.71	.....	66.00(1) 916.09(6) 30,768.53(8)	87,954.33
Earned surplus	252,726.73D	66,931.14(2) 90.96(4) 10,980.60(7) 30,768.53(8) 30,351.48(5)	.....	391,849.44D
Total	$2,227,025.51	$140,038.80	$42,731.22	$2,129,717.93

D—Deficit.

Notes: The numerical symbols in brackets indicate generally the offsetting debit and credit adjustments. Undeclared dividends on 7 per cent cumulative preferred stock amount to $248,325.00.

Gas Plant in Service

The adjustments will be discussed in the order enumerated. Mr. Mylott proposes to increase Gas Plant in Service $66 and to decrease it $89,700.12. The increase is to be made in the Mains account to correct for a contribution in 1923 for the extension to a certain 4-inch wrought iron main. This should have been credited to the account, Contributions in Aid of Construction, and that is now being done.

The deduction of $89,700.12 (Item 2) is composed of:

Organization	$25,083.02
Storage land	19,174.41
Storage structures and improvements	13,357.18
Distribution land and land rights	4,660.44
Interest during construction	14,945.78
Other overheads	2,772.98
Phillips' fees	9,706.31
Total	$89,700.12

Organization—$25,083.02.

[1–7] This item consists chiefly of a charge of $25,000 in 1916, purporting to represent a payment to George MacDonald, described on the voucher as follows:

"To services and expenses in connection with promotion and organization of the Long Beach Gas Company including legal expenses; examination of the trust mortgage of the Long Beach Estates; investigation and examination of the legal matters in connection with the incorporation of the village of Long Beach as to their jurisdiction over streets and highways; preliminary engineering expenses and hiring of engineers for the purpose of ascertaining the amount and character of the gas distribution system laid at Long Beach; character of the soil; preliminary engineering maps in connection therewith; conference with officers of the estates of Long Beach at Long Beach and New York city; preliminary and tentative contracts drawn up and negotiations for extension and purchase of gas mains; conference with officers of the incorporated village of Long Beach; attendance at hearings at Long Beach in connection with introduction of gas therein; attendance upon hearings, mass meetings of the taxpayers and citizens of the village of Long Beach regarding gas; expenses in connection with preparing and distributing circulars to interest the citizens, householders, architects, etc., in the introduction of gas; attending conferences and hearings relative to the incorporation of the Long Beach Gas Company and subsequent purchase for the Long Beach Gas Co. of the gas distribution system. All work in connection with above extending from 1912 to 1916 . . . $25,000."

This statement covers several types of alleged services, some of which might possibly relate to items includible in Organization account according to the present system of accounts, but others could not possibly be so included. For example, preliminary engineering expenses for the purpose of ascertaining the amount and character of the gas distribution system laid in Long Beach is not an organization expense, according to any reasonable interpretation of the term. Work in connection with extensions and the purchase of gas mains is similarly no part of organization expense; if it is to be included anywhere, it should be included under engineering. Conferences with officers of the incorporated village of Long Beach have to do with franchises or consents but not organization. Expenses in connection with preparing and distributing circulars to interest people in the use of gas is an operating expense, not a capital charge.

The voucher gives no breakdown of the lump sum figure and is not supported by any receipts from engineers and others whose services the bill purports to cover. Mr. Mylott was unable to obtain any indication of how the total sum should be distributed among

the various items. Without such distribution, it is impossible to allocate to the proper account any item even though the payment, if known, might be considered a proper charge to some other account.

Mr. Booth, the company's auditor, testified concerning this charge. On direct examination, it was his opinion that it belonged in the Organization account; but on cross-examination he was unable to say what portion of the $25,000 represented promotion costs, organization costs, or any of the other different items mentioned in the voucher or bill.

The definition of Account 301, Organization, in the present system of accounts is as follows:

"301. Organization

"This account shall include fees paid to Federal or state governments for the privilege of incorporation and expenditures for organizing the corporation, partnership, or other enterprise and putting it into readiness to do business.

"Items

"1. Cost of obtaining certificates authorizing an enterprise to engage in the public utility business.

"2. Fees and expenses for incorporation.

"3. Fees and expenses for mergers or consolidations.

"4. Office expenses incident to organizing the utility.

"5. Stock and minute books and corporate seal."

Notes A and B omitted.

The charges which Mr. Mylott did not question as appropriately chargeable to this account included an item of $850 described as follows:

"R. J. LeBoeuf—

"Legal services relative to the organization of the Long Beach Gas Company, Inc.; Preparation of certificate of incorporation including bylaws, attendance at all proceedings incident to incorporation and meetings of incorporators."

This bill is clearly a proper charge to the Organization account, but there is nothing in the bill of Mr. MacDonald that can be identified or connected with the items mentioned in the definition given above.

Further, in Case No. 9815, decided April 30, 1940, involving the rates of the Long Beach Gas Company, the same deduction was made from the Organization account as Mr. Mylott makes here and counsel for the company took no exception at that time.

Considerable discussion was had during cross-examination of Mr. Mylott to the effect that preliminary engineering services might properly be chargeable to engineering or other property account. But as Mr. Mylott testified, there is nothing to indicate how much, if any, of the $25,000 related to such services. Further, the company itself has made no attempt to assign any portion to any property account other than Organization.

In view of all those circumstances and considered in relation to the size of the company, the matters to be covered in organizing a small company and the charges made in other cases constantly coming before the Commission, the total amount cannot be considered as part of the orginal cost of plant in service.

The small item of $83.02 represents a charge in 1930 for "preparing certificate of increase in number of di-

rectors." It will be seen from the text of the account that such an item is not includible therein.

Having concluded that $25,083.02 should be eliminated from Gas Plant in Service, we come to the question—To what account shall it be charged? There are two possible ways of disposing of the item, namely, charge to Account 105, Gas Plant Acquisition Adjustments or to Surplus. As the provisions of the Uniform System of Accounts must be applied, I quote those applicable to Account 105:

"105. Gas Plant Acquisition Adjustments

"A. With respect to gas plant acquired prior to January 1, 1938, and still in service, leased to others, and held for future use at that date, this account shall include the difference between the book cost thereof as of December 31, 1937, and the original cost thereof when such difference is not clearly includible in any other account, unless otherwise ordered by the Commission.

"B. With respect to gas plant acquired after December 31, 1937, as an operating unit or system by purchase, merger, consolidation, liquidation, or otherwise, this account shall include (unless otherwise ordered by the Commission) the difference between (a) the cost to the accounting utility of such gas plant and (b) the original cost thereof, estimated if not known, less the amount or amounts credited to the depreciation reserve of the accounting utility at the time of acquisition with respect to such gas plant. (See gas plant instructions, 2, 3, and 4).

"C. Whenever practicable, this account shall be subdivided according to the character of the amounts included herein and so as to show the amounts applicable to gas plant in service, gas plant leased to others, and gas plant held for future use.

"D. A record shall be kept of the amounts in this account for each property acquisition after December 31, 1937.

"E. With respect to the amount applicable to gas plant acquired prior to January 1, 1938, and to each property acquisition thereafter, the utility shall notify the Commission as to its program for depreciation, amortization, or other disposition of the amounts included in this account."

As the item here being considered relates to expenditures prior to 1938, paragraph A is the most important. It provides that the difference between the book cost and the original cost shall be placed in that account "when such difference is *not* clearly includible in any other account, unless otherwise ordered by the Commission." The Commission has as yet made no determination. Consequently, the first question to be answered is whether the item here being considered is clearly includible in another account.

The company has classified it in the Organization account, but, for reasons already stated, this is considered improper. A careful reading of the provisions in Account 105 indicates that this account is to include excess book cost over original cost arising *out of plant acquisitions,* but the item here being considered did not arise from this source. It was not entirely related to the acquisition of any property, and even if we concede that a part might be so attributed if it could be

segregated, the entire amount does not relate to acquisition of plant, and there is no way of determining how much should be so attributed if the Commission were to decide to do so.

Mr. Mylott suggests that it should be charged to Earned Surplus on the ground that part of it should have been and would be new, if the expense were presently incurred, charged as an operating expense. As it relates to a past period, it cannot now be charged as an operating expense and must be charged to Surplus.

Storage Land—$19,174.41.

[8] This item consists of rentals of $18,000 ($12,000 for the year 1926 and $6,000 for the first six months of 1927) plus overheads arbitrarily assigned to the rentals amounting to $1,174.41. When the company acquired the property in 1927, it capitalized the purchase price of the property and also the rentals paid prior to the date of acquisition. Rentals are operating expenses and not capital charges. Hence, the total charge of $19,174.41 was an improper entry and should now be reversed by crediting the property account and debiting Surplus.

In Case No. 3927 (printed page 389 [1938] 1 Ann Rep NYPSC 353, 22 PUR(NS) 289, the Commission found that this item was not a part of the cost of land (this was likewise noted by the Commission at page 14 of its printed opinion in Case No. 9815). On cross-examination of Mr. Mylott, reference was made to an opinion of the company's counsel at the time of purchasing the land, but the company did not introduce this in evidence or include it in the brief.

Storage Structures and Improvements —$13,357.18.

This item represents the cost of heating equipment for the gas holder, which equipment was not in service on January 1, 1938, and was held for future use. The company itself transferred this item from Gas Plant in Service to Gas Plant Held for Future Use in June, 1939. It is so treated here.

Distribution Land and Land Rights—$4,660.44.

[9] This consists of a payment of $4,375 to the Nassau & Suffolk Lighting Company as reimbursement for a payment by that company to Henry MacDonald for professional services and expenses and assigned overheads of $285.44, making a total of $4,660.44. Mr. Mylott included a photostat copy of the voucher of the Nassau & Suffolk Lighting Company, dated May, 1926, giving the following description for the item of $4,375:

"To professional services in connection with the negotiations, conferences, and meetings with the board of directors and stockholders of Atlantic Beach Associates, Inc., of Long Island, seeking the acquisition of exclusive and perpetual easements and rights of way over practically all that property situated at Long Beach, west of the incorporated westerly boundaries of the city of Long Beach and running westerly to the Rockaway Inlet. These conferences and meetings cover a period of practically six months and during which time no less than six different types of easements were prepared and an equal number of contracts; conferences in New York city and meetings with stockholders

and directors of Atlantic Beach Associates, Inc., in New York city and Brooklyn and Long Island. Examination of dates, government records, and corporate documents of the Atlantic Beach Associates, Inc., trips to Rockaway and Atlantic Beach. Examination of the statutes and decisions in connection with the foregoing

	$3,500.00
Expenses and disbursements in connection with above	875.00
	$4,375.00"

As in the case of another payment to George MacDonald, previously mentioned, no details were obtainable. On cross-examination Mr. Mylott stated: "We asked the company to furnish us with written easements showing the rights that the company claimed it obtained for the payment of this $4,375," but the company did not do so. As the item has no support and represents nothing the company now possesses of value, it should be eliminated and charged to Surplus.

In Case No. 9815, the amount was excluded from the cost of existing property and no exception was taken by counsel for the company.

Interest during Construction—$14,945.78

In Case No. 3927, *supra* (printed pages 388, 389), it was held that interest charges of $2,772.67 and $12,423.26 (total of $15,195.93) should be eliminated from plant accounts. Mr. Mylott accordingly eliminated that amount from the various property accounts to which it had been spread. Of the total of $15,195.93, the major portion or $14,954.88 (less $9.10 which was retired in 1937, leaving the amount of $14,945.78) was eliminated from Gas Plant in Service and the remainder ($241.05) was eliminated from the amount set up in Account 105, Gas Plant Acquisition Adjustments. This adjustment was not questioned by company counsel. Mr. Mylott charged these amounts to Earned Surplus.

Other Overheads—$2,772.98.

This adjustment carries out the finding in Case No. 3927, *supra* (printed page 388), that certain charges for engineering and superintendence, law expenditures during construction, and injuries and damages during construction, were improper. Mr. Mylott made a slight revision of the company's allocation of these overheads, resulting in the amount of $2,772.98 which he transferred to Earned Surplus. Counsel did not question this proposal.

Phillips' Fees—$9,706.31.

The dispositon of this item requires considerable discussion and is deferred until all of the other items have been disposed of. Mr. Mylott recommends that it be charged to Earned Surplus.

The charge to Surplus appearing on Table 1, amounting to $66,931.14, is made up of the items already discussed and found chargeable to Surplus, plus the small item of $294.51 representing interest and other overheads which the company included in Account 105.

Gas Plant Acquisiton Adjustments [Account 105]

[10–14] In its preparation of continuing property records, the company made an inventory of its property as of December 31, 1936, and, according to the testimony of Mr. Booth, this inventory was priced according to costs

shown on the books of the company. The resulting property costs were reclassified according to the system of accounts that became effective January 1, 1938, and "the difference between the book cost at December 31, 1937 and the original cost ($33,124.03) was charged to Account 105, gas plant acquisition adjustments."

In order to determine whether this is a proper entry, one must analyze the various items entering into the total which consists of the following groups of items (compiled from Exhibit 4, Table 10):

(1) Property no longer in existence and not included in the inventory		$27,381.46
(2) Property not used or useful		6,150.70
(3) Appraisal of holder site		266.31
(4) Relocation of property		1,068.61
(5) Certain assigned overheads		294.51
(6) Items originally charged to organization		976.61
Total		$36,138.20
Less—		
(7) Meters inventoried but not charged to property on books	$2,436.07	
(8) Miscellaneous items relating to retirements, repricing, etc.	578.10	3,014.17
Net Total		$33,124.03

The largest part of the first item consists of $19,772.70 for "services and stubs no longer in existence and not included in inventory 12/31/36." Mr. Booth was cross-examined about this and stated: "These were services that were laid in anticipation of a large real estate development there and at the time we made our inventory they were not included in there because they were not being used and useful." He did not know whether they are any longer in existence, and admitted they could not now be located. Obviously, the amount for these services does not belong in Account 105.

The remainder of the item includes book cost of governors "no longer in existence," meter installations and general equipment which were not inventoried. These too should not be in Acquisition Adjustment Account but should be eliminated entirely.

The same is largely true of the second item which is for "steam line from power plant no longer in existence to holder." Mr. Booth was cross-examined as to this item and admitted that it was not included in the company's inventory of used and useful property, but was not sure whether or not it was still in existence. It was evidently not intended for future use, for the company did not so classify it.

The property should have been charged off when the plant from which the steam was supplied through the line in question was removed and written off.

The third item of $266.31 is described in Exhibit 4 as "appraisal of holder site after purchase" in 1928. This is no part of the cost of the land and has been excluded by the company from plant in service. It should not have been charged to the land account originally under either the present or previous accounting system and should have been written off when incurred through operating expenses.

The fourth item is also an operating expense.

The fifth item represents certain overheads assigned to some of the above. Having excluded the items to which they apply, the overheads must follow.

The sixth item is principally composed of $700 paid to C. A. Hickey, an

attorney, in relation to contracts with the village of Long Beach. The payment was made about 1916 and the record does not indicate that there are any contracts now in existence to which this charge relates. There is no explanation of an additional charge of $212.51. The company admits it is not part of the cost of Gas Plant in Service or held for future use. Due to the absence of testimony showing its exact nature, it must be excluded. The remaining items are small except one for directors' fees. These appear to be operating expenses and not proper capital charges under any system of accounts. On the record as it stands, the entire amount of $976.61 must be excluded.

As the matters in item seven have been entered in property account and originally reduced surplus, this credit should be made to Surplus, but in any event it has no relation whatever to Account 105.

Item (8) is made up of a number of small items, some debits and some credits. The various items appear in Exhibit 4, Table 10. If entered in Surplus account, the net effect will be to increase surplus and the items are so small as not to merit extended discussion.

Having determined that the entire amount in Account 105 does not properly belong there, the next question that arises is where should the items be charged. Mr. Mylott set them apart for further disposition by the Commission, being part of the amount shown on Table 1 opposite this heading of $42,535.83. Upon being pressed by counsel for the company to suggest how the items should be disposed of by the Commission, Mr. Mylott testified that in his opinion they should all be charged to Earned Surplus.

Counsel for the company seemed much disturbed because Mr. Mylott refrained from specifically reclassifying in his table every item that was on the company's balance sheet, and because there was no such account as "Balance for Further Disposition"; but findings are made herein and every item will be classified in some account.

[15] As practically all of the item now being discussed relates to property no longer in existence, not used and useful, and not included in the inventory, the question naturally arises whether the book cost (over $33,500) should not be charged against the reserve for depreciation instead of surplus. This might be a natural procedure if adequate provision had been made in the past to meet the depreciation constantly accruing or to provide a reserve to which all retirement losses could be charged; but as of January 1, 1938, the balance in the depreciation reserve was only $5,527.38 for property having an original cost of nearly $1,850,000. Obviously, the reserve is such a ridiculously small amount (less than three tenths of one per cent) that it conclusively proves that no real attempt has been made in the past years to build up a reserve adequate to meet even retirements as they occurred, to say nothing about the depreciation which accrues from year to year and for which provision should be continually made.

Further, if the reserve were to be charged as suggested, the small balance would be entirely wiped out and there would be a deficit in the reserve to the extent of about $28,000. A

transfer would need to be made from Surplus in order to meet the charge against the reserve. The net result would be that four-fifths of the charge which Mr. Mylott recommends should be made against Surplus would indirectly come out of Surplus. All in all, it would appear that the company has never attempted to build up a reserve to meet these retirements, and not having done so, the proper place for them to be entered when found is in Surplus account.

If it be argued that one should not consider the present balance in the reserve for depreciation but the balances in the Retirement Reserve Account when the property not now in existence or not now used or useful was retired from service, a similar condition will be found to exist. For example, Exhibit 4, Table 10, shows retirements made some time after 1926 of over $8,500. At the end of 1926, the balance in the reserve was $1,218.30 and at no subsequent period has it equaled $8,500 (see annual reports to the Commission).

The principal items of the total relate to property that is not in the inventory (about $22,000). It is not known when this property was retired, if it were used and useful at any time, but at no time in the entire history of the company has it had a sufficient amount in its reserve to meet such a charge if one were made.

From these facts we must conclude that the amount charged to Account 105 should be charged to Earned Surplus.

When all of the changes recommended above have been made and the Phillips fees have been excluded, which subject will be discussed later, the original cost of "Gas Plant in Service" as of January 1, 1938, for accounting purposes becomes $1,846,461.98. Lest there be any misunderstanding as to the meaning of this account and the use that might be made of it in any future proceeding, attention should be called to a few important facts.

In the first place, paragraph (5) of the order of the Commission adopted June 16, 1937, prescribing the system of accounts provides:

"5. That in prescribing this system of accounts, the Commission does not commit itself to the approval or acceptance of any item set out in any account, for the purpose of fixing rates or in determining other matters before the Commission. The prescribed system of accounts is designed to set out the facts in connection with the capitalization, construction, income, expenditures, etc., and therefrom the Commission will determine, in connection with such matters as may be under advisement from time to time, just what consideration shall be given to the various items in the several accounts."

[16] Recently, the question was specifically raised as to how property should be classified under the systems of accounts which is only partially used and useful in utility operations and which is of such a nature that the portion so used is not separable from the portion which is not so used. The ruling made by the Commission upon February 5, 1941, was to the effect that for accounting purposes, plant in service could include "the original cost of units of property which are partially used and useful in utility operations, when the portion which is so used and useful is not separable from that which

is not used and useful." That ruling is being followed in this case.

In the recent rate case affecting the Long Beach Gas Company, the question was raised whether the property was wisely engineered and constructed and whether the original cost of the property in existence and used to some extent to serve the area of supply was entitled to a fair return. It was not necessary to make a final determination upon these points as the Commission concluded that the company had not borne the burden of proof required by statute and that the proposed increased rates had not been justified. It was pointed out, however, that accepting the original cost less accrued depreciation and computing only a 5 per cent return thereon, an unusually heavy burden would be imposed upon consumers and that the relation of the amount of gas sold to the amount of mains was relatively very small—all of which indicated that the plant had been overbuilt and that it was not all used and *useful.* (See opinion of the Commission adopted April 30, 1940, in Cases Nos. 9815 and 9838.)

No attempt has been made in this case to determine these questions and all of the property which was used even in part has been included in the account "Gas Plant in Service" for accounting purposes. The extent to which the plant is used and useful in a rate proceeding must be determined at the time of the proceeding. The determination now being made is that as of January 1, 1938, the property actually used to some extent in the service of the public as of that date had an original cost of $1,846,461.98.

[17] Attention should also be called to the fact that "Gas Plant in Service" includes the original cost of property paid for by consumers which is being used to render gas service. Whether this property belongs to the gas company is questionable. Following its general practice, the Commission has permitted the company to include the original cost of such property in "Gas Plant in Service," provided an offsetting liability account is established which will show the source of the funds obtained which the company itself did not provide. By so doing, the Commission leaves open for determination whenever the question arises and a company decides to make an issue of the matter whether the property does belong to the gas company and whether it is entitled to a return on such property even though it did not provide any funds for its construction. The total amount of such funds in the hands of the company as of January 1, 1938, is shown by Table 1 to have been nearly $90,000.

[18] There is a further point. This company has in many instances paid for services upon private property. It is probably true that the company has no title to such services and having no title, it cannot be said to own the services. However, they represent an investment made by the company in order to render service and following the principle applied to consumers' contributions, the company has been allowed to include in "Gas Plant in Service," the cost of such services even though on private property. If a strict application of property ownership were used to determine a rate base, these services would probably be eliminated; but the company has made an investment in order to

render service and we believe it is fair that such property should be included in the rate base, just as we believe that the contributions made by the public should be deducted in determining a rate base.

Unamortized Debt Discount and Expense

The amount of $90.96, representing fees paid to a fiscal agent for services in paying bond coupons in 1917, 1918, and 1920, was transferred by Mr. Mylott from unamortized debt discount and expense to earned surplus. This was in accordance with the Commission's opinion in Case No. 3927 (1938) 1 Ann Rep NYPSC 353, 22 PUR(NS) 289, and was not questioned by company counsel.

Other Deferred Debits

[19] On the company's balance sheet of January 1, 1938, there appeared an item of $30,351.48 as the balance in the account Other Deferred Debits. Mr. Mylott explained that this consisted of two items, the first being $26,393.82 representing so-called development expenditures incurred by the company during the period from 1916 to 1919, inclusive. In Case No. 3927, *supra*, the Commission's opinion (printed page 36) stated that this item was an operating expense and not a proper capital charge. Mr. Mylott accordingly transferred it to earned surplus. In cross-examining Mr. Mylott, counsel for the company called attention to a suggestion in a report of the Commission's accounting division in Case No. 3927, in 1935, that this amount might be either amortized over a period of years or written off. However, as these expenditures, classified by the company as deferred debits, were incurred more than twenty years ago, there seems to be no necessity for further delay in eliminating the item from the balance sheet by a charge to surplus.

[20] The remainder ($3,957.66) of the item represents a part of certain costs incurred by the company from 1930 to 1935 in connection with the inventory and appraisal of its property. The company has been amortizing the total through the years and all was charged off prior to December 31, 1940; but under the system of accounts in effect in 1931 and under the present system of accounts, the company had no authority to spread any expense over a period of more than one year without the approval of the Commission. The company never made application for approval and it was therefore in duty bound to charge all of the cost of the work to operating expenses in the years in which such costs were incurred. The Commission cannot now recognize as proper any such violation of the systems of accounts and the balance as of January 1, 1938, should be charged off as of that date to surplus. This procedure will not affect the surplus as of December 31, 1940.

Capital Stock Expense

Another adjustment made by Mr. Mylott was a transfer of $719.32 within the account, Capital Stock Expense, from the subaccount relating to preferred stock to that for common stock. This correction was not challenged.

Customers' Advances

Mr. Mylott transferred $916.09

from the account, Customers' Advances for Construction, to Contributions in Aid of Construction. This amount was made up of three items which in his opinion were not subject to refund and therefore belong in the latter account instead of the former. On cross-examination, Mr. Mylott was asked concerning such indications as he had that these amounts were not subject to refund. Two of these amounts were subject to a 5-year limitation on the right for a refund. As to the third, which was advanced in 1924, no refund has been made. In view of these facts Mr. Mylott made the transfer referred to. The company, as indicated by cross-examination, was apparently concerned chiefly with the fact that the contributions account to which Mr. Mylott transferred these items is deductible from the plant accounts in connection with rate making. The subject was not raised in the company's brief, however.

Reserve for Depreciation

[21, 22] Mr. Mylott recommended that there be restored to the reserve for depreciation the balance in the reserve "Accrued Amortization of Capital" which was transferred in 1923 from the reserve to surplus.

Under the system of accounts prior to 1924, the company was required to establish a reserve to meet accruing depreciation and in 1923 the balance in such reserve, *which had been created out of charges to operating expenses* was $10,980.60. The balance in the reserve after the transfer being made was thereby reduced to nothing. (See reports to Commission.)

Counsel for the company in examining Mr. Booth concerning this item referred to an order of the Commission in Case No. 3927 in 1927, 1 Ann Rep NYPSC 184, implying that as the company was not required at that time to restore the item in question to the reserve it should not be done now. But failure to require proper action in 1927 is not determinative of what should be done today. The transfer never should have been made to surplus and it should now be returned to the account where it belongs.

Contributions

[23] Mr. Mylott's proposed transfer of $30,768.53 from Earned Surplus to Contributions in Aid of Construction, represents amounts collected by the company during the period 1927 to 1929, inclusive, in connection with the installation of new mains and services. These amounts were credited to merchandise and jobbing revenues, contrary to the requirements of the uniform system of accounts at that time. These payments should be accounted for as contributions, and this entry makes the proper correction.

Phillips' Fees

Reference has already been made to certain charges totaling $9,706.31 which Mr. Mylott recommends should be deducted from the plant accounts and charged to Surplus. This amount consists of $9,111.81 representing fees paid to E. L. Phillips & Company and $594.50 computed overheads arbitrarily assigned to such fees.

The fees arise from a contract made between E. L. Phillips & Company and the Long Beach Gas Company in 1927, according to which E. L. Phillips & Company was to do engineering and construction work at cost plus a

burden and plus a 5 per cent fee upon such cost and burden. The amount of the fee in this case is not large, but as E. L. Phillips & Company had practically identical contracts with every company in the Long Island Lighting system, as the total amount involved for all of the companies is very considerable and as a determination here made must apply to all of the companies, for reasons which will later appear, the question of the propriety of such a charge as a part of original cost needs to be thoroughly considered.

The first case in which the issue was clearly raised as to the justification of the Phillips fee was the Long Island Lighting Company Rate Case, decided December 18, 1935, 1 Ann Rep NYPSC 788, 18 PUR(NS) 65. In that case, the company was represented by Whitman, Ransom, Coulson & Goetz, attorneys; and Colonel Charles G. Blakeslee, then counsel for the Commission, appeared and examined witnesses. He presented the results of investigations made by members of the Commission staff and cross-examined company witnesses. About 1,210 pages of testimony and 91 exhibits were received in relation to this matter and the testimony was analyzed at length. Such analysis and discussion occupied over 12 printed pages in the memorandum of the Commission (1 Ann Rep NYPSC at pp. 788, 854). Briefly stated, the conclusion was as follows (Ibid., at pp. 866, 867, 18 PUR(NS) at pp. 116, 117):

"We conclude from all of the testimony upon this subject that the fee charged and collected by E. L. Phillips and E. L. Phillips & Co. during the existence of the cost-plus contract is not a reasonable part of the cost of the property. Notwithstanding the doubt as to the reasonableness of the construction cost of certain parts of the property and of the propriety of certain expenditures used to justify the burden percentage, the cost of the work done by E. L. Phillips & Co. will be accepted at the amount paid to E. L. Phillips & Co. for labor and materials and the burden computed thereon. This conclusion is reached not alone upon the facts cited in these pages under the heading of Phillips' Construction Fee, but in view of the determinations made as to overhead costs and other construction expenses in other accounts and under other headings. If one were to increase the allowances made for other items, the justification for the Phillips burden would be greatly lessened, because charges should not be duplicated, once under the burden charged by E. L. Phillips & Co. and once under theoretical allowances for overhead items, such as engineering, superintendence, interest during construction, etc."

The determination of the Commission in the rate case was appealed from and the appellate division of the third department unanimously sustained the order of the Commission which was based in part upon the exclusion of the Phillips fees (see Long Island Lighting Co. v. Maltbie [1937] 249 App Div 918, 18 PUR(NS) 225, 292 NY Supp 807).

Following the determination in the Long Island Rate Case *supra*, the Commission made similar decisions in rate cases relating to other companies in the system: Case No. 6983 — Citizens Committee v. Kings County Lighting Co.; Case No. 8403 — Re

Queens Borough Gas & E. Co. (1939) 1 Ann Rep NYPSC 707, 32 PUR(NS) 71; Case No. 9815 — Re Long Beach Gas Co. (1940).

None of the determinations in these cases was taken to court, but the whole matter was entirely reopened by counsel for the Long Beach Gas Company in this proceeding. Other counsel have been retained who appear for the Long Beach Gas Company but who also represented Mr. E. L. Phillips, who originally had a cost-plus arrangement with the Long Island Lighting Company and who became the president and the controlling person in E. L. Phillips & Co.

In order that the record in this case might be complete and the matter disposed of finally, special counsel was allowed great leeway in the introduction of testimony which in some respects contradicts the testimony of witnesses called by the Long Island Lighting Company in the rate case. Counsel for the Commission offered all of the testimony presented in the Long Island Lighting Company Rate Case, *supra*. Thus, there is now before the Commission in this case practically everything which the company, with different counsel, has offered in other cases at various times regarding this matter.

It is difficult to comprehend what is the theory upon which special counsel for the company is trying his case. Mr. Phillips testified that he could not show what the costs were for the Long Beach company that the "burden" and "fee" were supposed to cover (quoted *infra*). Special counsel at one point in the case wanted to bring in facts relating to the Long Island Lighting Company and the Queens Borough Company and he definitely stated that all of the contracts must be taken together. But when counsel to the Commission offered all of the testimony in the rate case, where all of the Phillips' cost-plus business was taken together, he strenuously objected to its receipt. At another stage of the proceeding, he claimed he would justify the burden and fee for each company separately. What was finally done was to allow all of the contracts to be placed in evidence from 1924 to 1933, all of the excerpts from the minutes of the boards of directors to the various companies, the testimony in reply to long suppositious questions and the testimony taken in other cases upon the subject. But the fact remains that there is still no testimony to show that the Phillips Company actually incurred expenses upon the work done for the Long Beach Company or any other company, which would justify a 5 per cent fee in addition to the other amounts paid.

It is obvious that a final determination made from the testimony submitted in this case should apply as well to all of the other companies in the system, and that if it is unjustifiable in this case, it is unjustifiable in other cases; if it is justified here, it is justified in other cases. It would seem that the system had had its day in court in the Long Island Lighting Company rate case, and having obtained a ruling in that case it should suffice for all of the other cases; but the company has not been content to accept this proposition; it has endeavored to make a new record. It has offered in other cases involving other companies the same record which is found here, but the Commission has ruled

that as the issues are being determined in this case, it is wholly unnecessary to thrash over the same questions upon the same evidence in case after case affecting other companies in the system where the facts would be precisely the same.

The position of the Long Beach Gas Company in the system appears in a prior opinion. All of its voting stock is held by the Queens Borough Gas and Electric Company and all of the voting stock of that company is held by the Long Island Lighting Company. The Long Beach company was brought into the system in 1927. The Queens Borough Company has been under the control of the Long Island Lighting Company since 1923. Thus, since 1927 those in control of the Long Island Lighting Company have been in a position to determine the actions of the Queens Borough Company and through it the actions of the Long Beach Gas Company.

The origin of the cost-plus arrangement between E. L. Phillips & Company and the various companies in the Long Island Lighting system was in an agreement in 1911 between Mr. E. L. Phillips and the Long Island Lighting Company. The construction work was originally handled by Mr. Phillips, doing business under the trade name of E. L. Phillips & Company. Later this company was incorporated and proceeded to do business with all of the companies in the system until 1933, when all of the contracts were terminated. In no case did Mr. Phillips or his company have a cost-plus contract with any of the companies prior to the time when each of the subsidiaries was brought into the system; and it is very significant that almost immediately after the Long Island Lighting Company obtained control of another company, directly or indirectly, a cost-plus contract was made with Mr. Phillips' company, which thereafter did nearly all of the construction and engineering work for each company.

Thus, although Mr. Phillips had a cost-plus contract with the Long Island Lighting Company immediately after he and his associates organized it, there was no such contract with the Long Beach Gas Company until the Long Beach Gas Company was brought into the system in 1927, the date of the Phillips' contract being November 18, 1927.

Mr. Phillips was never an officer of the Long Beach Gas Company but he became a director when the stock was acquired. Counsel took exception to the remark that the Long Island Lighting Company controls the Long Beach Company, apparently relying upon the fact that there was an intermediary company between the Long Island Lighting Company and the Long Beach Gas Company. The Commission is not so naïve as to believe that when the Long Island Lighting Company owns all of the stock of the Queens Borough Company, which in turn owns all of the stock of the Long Beach Company, those who control the Long Island Lighting Company do not control and virtually determine the policies of the Long Beach Company. As a practical matter, in order to ascertain where the ultimate control of the Long Beach Company lies, one must determine the controlling influence in the Long Island Lighting Company.

Mr. Phillips described at some length in his testimony the inception

of the Long Island Lighting Company and how he and Mr. Olmsted came to be so closely associated. He testified that among the concerns for which he did work in various parts of the country from 1905 to 1911, there was the Non-Pareil Cork Company. A Mr. Bogle was connected with this company and was also interested in the tin can business and the Curtis Leather Company. Through Mr. Bogle, Mr. Phillips obtained contracts and Mr. Bogle introduced him to his associates in the Curtis Leather Company, including Mr. Olmsted and Mr. Harrison.

Soon afterwards, Mr. Phillips had a conference with Messrs. Bogle, Harrison, and Olmsted, at which time they discussed the possibilities of the electric utility business with the idea of forming the Long Island Lighting Company. Mr. Phillips testified that "We all agreed to put in at that time $50,000 apiece to start off the Long Island Lighting Company," and the arrangement contemplated that Mr. Phillips' company (then unincorporated) would do the construction and engineering work in connection with such company. Mr. Phillips stated that he had investigated the Long Island territory and had recommended it to his associates.

The Long Island Lighting Company was incorporated in 1910 with Mr. Olmsted as president. Mr. Phillips became one of the directors. Shortly thereafter, Mr. Phillips became president and occupied that office until 1934 when he became chairman of the board of directors; he was also a director from 1911 to the present. He was the controlling interest at all times in E. L. Phillips & Company.

Special counsel for the company carefuly produced testimony to show that neither Mr. Phillips nor Mr. Olmsted, nor Mr. Childs ever held a majority of the stock of the Long Island Company and that neither Mr. Olmsted nor Mr. Childs had ever owned any stock or had any other financial interest in E. L. Phillips & Company. He seemed to have the idea that in order to control a company and secure a profitable contract with that company, one must control a majority of the voting stock; but everyone knows that a small percentage of the stock often controls and particularly where the others are perfectly willing to have a very favorable contract given to one of their associates in view of the financial returns they are obtaining in other directions. Mr. Phillips and Mr. Olmsted had for some time intimate business associations to their mutual financial benefit (1 Ann Rep NYPSC at pp. 796, 1035, 1041), 18 PUR(NS) 65.

Of the $3,000,000 of common stock (stated value) of the Long Island Lighting Company, Mr. Phillips personally owned in 1927 about $480,000 or 16 per cent; but through relatives and companies which he controlled, he held over 32 per cent at times (at pp. 792, 795). With Mr. Olmsted, he controlled, directly or indirectly, approximately half of the stock of the Long Island Lighting Company. The remainder of the stock, except the block held by Mr. Childs and his relatives, was widely scattered.

In view of these facts, it is obvious that Mr. Phillips, certainly with the

acquiescence of Mr. Olmsted, controlled the Long Island Lighting Company and could determine its policies as well as those of all of the subsidiaries.

This was no new situation in 1927, for in the rate case (6093), *supra*, the history of the Long Island Lighting system is summarized and it was there pointed out that Mr. Phillips and Mr. Olmsted controlled, directly or indirectly, over 50 per cent of the voting stock (at pp. 789, 795). That opinion does not show the ownership of all of the companies immediately prior to the acquisition by the Long Island Lighting Company, but where this information appears, the owners were either Mr. Phillips, or Phillips, Olmsted, and Childs together. These three are mentioned as the owners of the Consumers' Gas Company of Long Island, Long Island Gas Corporation, Sag Harbor Electric Light and Power Company, Patchogue Gas Company, and Sea Cliff and Glen Cove Gas Company (at pp. 1035, 1041). All five companies showed corporate deficits when purchased by the Long Island Company. The stocks of the first three of these companies were acquired by the Long Island Company at amounts substantially in excess of the net worth indicated by their books. Immediately following these purchases, the Long Island Company paid dividends totaling 15.66 per cent (at p. 797). The total amount of dividends paid on Long Island stock does not appear, but there is the following statement regarding the period immediately prior to January 1, 1935 (at p. 796, 18 PUR(NS) at p. 74):

"In the last eleven years, there have been declared in dividends $11,645,000, or nearly four times the entire amount contributed to the company by the stockholders. In other words, since 1923 the stockholders have received their original contributions back and nearly three times as much more. Even in the last five depression years the company has paid dividends aggregating 170 per cent, an average of 34 per cent annually."

It is not surprising, therefore, that Messrs. Olmsted and Childs were content to let the system develop with Mr. Phillips in charge, even under highly favorable terms for him. They had risked relatively little of their own money and they were making large profits.

The history of the various changes in the cost-plus arrangements between Mr. Phillips and the companies in the Long Island Lighting system are set forth in the opinion in the rate case (at pp. 856, 857). The various changes in the cost-plus arrangements are there described. After 1924, all of the contracts provided that E. L. Phillips & Company were to be paid the cost of labor and materials plus a burden of 5 per cent on field labor, 20 per cent on New York labor, and 3 per cent on material, plus a fee of 5 per cent, which was computed upon the basis of cost of labor and materials plus the percentages for burden just referred to (Ibid).

The parties to the various conferences regarding the form of the cost-plus agreements were Mr. E. L. Phillips and Mr. Russell F. Van Doorn. The record is not clear as to which of these gentlemen represented the different companies, but it would seem that the Long Island Lighting Company and subsidiaries were represented by

Mr. Van Doorn and E. L. Phillips & Company by Mr. Phillips. Regarding Mr. Van Doorn's position and connections, the rate case memorandum said (p. 855):

"Mr. Russell F. Van Doorn is a stockholder, director, vice president, treasurer, and auditor of the Long Island Lighting Company and its chief accounting officer. He has been connected with the company since 1911. In 1911, he established the accounting system used by E. L. Phillips & Co., and has been in charge of the accounting and financial departments of that company ever since. For many years he was not paid by E. L. Phillips & Co., but in later years he received some compensation. From September 18, 1928, to January 27, 1932, he was a director of E. L. Phillips & Co." (18 PUR(NS) at p. 107.)

In view of these facts, it is quite obvious that there was no arms'-length bargaining between E. L. Phillips & Co. and the companies in the Long Island Lighting system.

Mr. Van Doorn was called as a witness in the rate case. He was examined as to the records kept by E. L. Phillips & Co. regarding the various items that were included in the accounts of E. L. Phillips & Co. relative to the construction work done for the Long Island Lighting companies and the opinion of the Commission contains the following regarding items which were carried on the books of E. L. Phillips & Co. in connection with the work performed (at pp. 857–859): [Quotation from decision in 18 PUR(NS) 65, beginning at page 109 and continuing to page 111, omitted.]

In other testimony in the instant case, there are indications that there was never a clear-cut distinction between E. L. Phillips & Co. and the Long Island Lighting companies. For example, Mr. Booth, who acted as assistant to Mr. Russell F. Van Doorn, supervised the accounting department of E. L. Phillips & Company from 1930 to 1933, but during this period, his salary was paid not by E. L. Phillips & Company but by the Long Island Lighting Company. In the rate case, it was testified that although he devoted about one-fourth of his time to E. L. Phillips & Company, his entire salary was paid by the Long Island Lighting Company and no part was billed to E. L. Phillips & Company (Case No. 6093, *supra*).

In the quotation from the opinion of the Commission in the rate case, reference is made to the extent to which the affiliates advanced funds to E. L. Phillips & Company. This subject was also mentioned in testimony given by Mr. Phillips and Mr. Booth in the instant case, where an attempt was made to show that the advances to Phillips & Company were not in excess of the amounts due that company for work done. In Case No. 6093, it was brought out that advances made to Phillips & Co. by the Long Island Lighting Company amounted to more than $3,000,000 on December 31, 1928 (at pp. 858, 859). In the present proceeding, after Mr. Phillips stated that the advances at any time did not to his knowledge exceed the amount of work done and material furnished for the Long Island Company and its subsidiaries, he was asked: "Would $3,000,000 be more than the work you had done at any

one date?" And he replied, "Certainly."

Ordinarily, in any case where a company attempts to justify a payment made to an affiliate, facts would be submitted to show that the fee covered necessary expenses which were not included in the cost upon which the fee was computed. Special counsel has made no attempt to do so in this case. When Mr. Phillips was on the stand, he was questioned by the Chairman upon this point and distinctly testified that he could not show what expenses were incurred which were covered by the burden and fee in the case of any company including the Long Beach Company. The testimony is as follows:

Chairman Maltbie to Witness:

Q. Mr. Phillips, did you keep any records to show separately the cost of the work, the burden, and the fee on the work done for the Long Beach Gas Company?

A. I don't think there would be any separate—the cost of the work we would have separately, but on the burden and fee, I don't think we would have it.

Q. You wouldn't have it?

A. The fee of course is the fixed sum of 5 per cent. That is easy to figure.

Q. Yes, I know, but what about the costs which go into the burden and fee? Were they kept separately for the Long Beach Gas Company?

A. No.

Q. Or for any of the companies?

A. No.

In the rate case, there was similarly no attempt to show what items of expense to E. L. Phillips & Company were covered by the fee. There was testimony regarding the work as a whole but there was no separation for each company.

Recognizing this situation, special counsel undertook to cover the field as a whole and offered the various contracts between E. L. Phillips & Company and other system companies upon this basis. If the subject were to be treated as applicable alone to the Long Beach Gas Company, it would, of course, be necessary to show the facts relating to that company and facts relating to other companies would be immaterial and irrelevant.

What special counsel was finally allowed to do was to put in all of the contracts and testimony regarding the Phillips' arrangement with all of the companies, but he nowhere attempted to justify, except possibly by certain opinion testimony, the propriety of the contract with the Long Beach Company as a separate transaction.

The testimony in the rate case as to the results of the arrangements, and particularly as to any costs which would justify a fee of 5 per cent, related to the entire work, there being no segregation on the books of E. L. Phillips & Company to show what the justification of the fee would be on the basis of actual figures for any individual company.

In the rate case, considerable testimony was given by Colonel Alten S. Miller, an engineer called by the company, and Mr. Francis T. Mylott, an accountant on the Commission's staff. The testimony of Colonel Miller was apparently produced for the purpose of justifying the burden and fee as proper additions to the actual cost of labor and materials. All of that testimony

is a part of the record in this case. The analysis and findings made by the Commission upon that testimony are very important here as indicating, wholly apart from opinion evidence, what *actually* occurred and whether E. L. Phillips & Company was justified in charging the companies in a system which he virtually dominated amounts in excess of actual costs. The memorandum in the rate case contains the following (PSCR 1935, pp. 859–866); [Quotation from Re Long Island Lighting Co. (1935) 1 Ann Rep NY PSC 788, 18 PUR(NS) 65 omitted. This quotation starts on page 111 and ends on page 116.]

Special counsel in the instant case made no attempt to establish the actual cost or the reasonable cost of the work done by E. L. Phillips & Company for the Long Beach Gas Company or any other company in the system or all of the companies combined. Mr. Booth did testify that the burden and fee percentages were correctly applied and actually billed to the company. But from the testimony of Colonel Miller and Mr. Mylott, it is definitely shown that while the burden addition may have been justified by actual experience and actual figures, the 5 per cent fee was not.

The main reliance of special counsel, in his effort to defend the amount of the fee in its entirety, was the opinion testimony of two witnesses, both of whom were engineers connected with corporations doing a large engineering and contracting business.

The first of these two witnesses was Mr. Maxwell M. Upson, president of the Raymond Concrete Pile Co., which has done heavy construction work, largely foundations, in the United States, and a greater variety of work, including electric plants, pumping stations, waterworks, ports, oil pipe lines, etc., in South America. About half of his company's work was on a lump sum basis and half on a cost-plus basis. The major portion of their work now is for the government, largely for defense purposes in the Pacific. This is at cost plus a *fixed* fee which is equivalent to approximately $5\frac{3}{4}$ per cent. On other cost-plus contracts, a fee of 10 per cent or more has been charged, with 12 and 15 per cent in various instances in South America. The fees included overhead or burden, no separate percentage for burden being charged. "We have taken the attitude that we want our percentage to cover all the items."

Among the contracts that Mr. Upson's company has had were several covering work for the Long Island Lighting Company system, including a contract of about $100,000 for a powerhouse foundation and one for the foundations for a large gas holder at Long Beach. The contracts were given by and the work was done for E. L. Phillips & Co. Mr. Upson had known Mr. Phillips for a long time, having been associated with him for part of the period from 1899 to 1907 when they were both connected with Westinghouse, Church, Kerr & Co.

In answer to a hypothetical question of some 1,050 words, setting forth the size of the Long Island Lighting Company system, its growth from 1924 to 1933, the scope of work done under the Phillips contracts, and the burden and fee percentages, Mr. Upson testified that the 5 per cent fee was fair and reasonable.

The other witness on this point was

Mr. John Coffee Hays, executive vice president of Stone and Webster Engineering Corporation. He had been engaged in the engineering and contracting business for approximately forty years. His company has done a large amount of construction work in the New York metropolitan district, including utility work, office buildings, etc., and for many utilities outside of that district. All of the company's construction contracts are on the basis of cost plus a fee *which includes overhead*. Exhibit 33, a printed contract form, sets forth the various percentages of fee for work of various types and magnitudes under a "term" contract, for which the fee percentages are one-fourth of one per cent lower than the company's "standard" fees. For a job of $500,000 or less, involving a relatively large amount of designing and of service from the headquarters and district offices, the maximum fee of 9¾ per cent (10 per cent, standard) applies. This scales down to 3 per cent for a job of over $15,000,000 requiring relatively little designing.

One of the activities of Stone & Webster Engineering Corporation is inventory and appraisal work. Mr. Hays has been particularly responsible for this activity. In the period from 1930 to 1934, the company did a large amount of inventory and appraisal work for the Long Island Lighting Company and its subsidiaries.

When asked a hypothetical question similar to the one propounded to Mr. Upson, Mr. Hays stated his opinion that the contract was fair, reasonable, and just.

The testimony of these witnesses calls for comment. Aside from the fact that both men were vitally interested in the contracting business and in contractors' fees and profits, and that they had had important business dealings with Mr. Phillips or the companies in which he was interested, the hypothetical question that they were asked omitted one fundamental circumstance, disregard of which vitiates their answers. It contained no hint that Mr. Phillips was the head of the whole Long Island Lighting Co. system, at the time of drawing the contracts with his alter ego, E. L. Phillips & Co., and during the entire life of those contracts. The contracts of E. L. Phillips & Co. were with a single unified system, affiliated within itself and with the contractor as well. Mr. Phillips, as head of the Long Island system, could foresee and plan and direct the course of construction activities, to be undertaken by E. L. Phillips & Co.—without any competitive bidding in the entire period—in a way that an independent contractor could only dream about.

Neither witness had actually employed a basis of charging wherein a fixed percentage of profit was superimposed upon a base figure that included the overhead costs.

[24] Special counsel in the course of the proceeding declared that "it is only when it is found by the trier of the facts that there was some fraud, over-reaching, or unfair dealing that such a contract would be declared void." But the Public Service Law has a different standard for all contracts such as that entered into by the Long Island Lighting Company and all of its subsidiaries and affiliates with E. L. Phillips or E. L. Phillips & Company. It provides that no charge

for management, construction, engineering, or similar services made by an affiliated interest as defined in the law (and that definition is a very broad one, which would cover the relationship we are here discussing) shall *exceed the reasonable cost* of performing such services (§ 110, Par. 3). While this provision in the Public Service Law represents a recent addition, it recognizes the standard which should long have guided the relationships between affiliated interests in any group, and which the public has been entitled to have had applied. It did not set up a new standard; it merely expressed in the law and gave legal recognition to what was long recognized as fair dealing.

But whatever may be the opinion of a person who is anxious to get the same form of favorable contract with other utilities, and whatever may have been the opinion of anyone before the contracts were entered into and one had available the actual experience under those contracts, the proof of the pudding is the eating. We have available from the beginning of these contracts to their termination in 1933, analyses of the actual results. We are not dependent upon opinion testimony, therefore, to determine the question of whether the 5 per cent fee was a reasonable one; we have the actual experience represented by the figures for the cost of the work, the expenses incurred and the profits that were made. Theory is one thing; opinion is one thing; but a little actual experience is far better than either and as our analysis already shows, there were no expenditures which would justify the payment of a fee in addition to the burden which had already been added to the out-of-pocket expenses for labor and materials.

[25] E. L. Phillips & Company was practically the construction department of the Long Island Lighting system and it differed only from such construction departments in that it had a separate corporate existence and that it made a profit out of the companies which the controlling interest also controlled.

We conclude, therefore, that the fee paid to E. L. Phillips & Company was not a proper charge and should not have been paid. As a matter of fact, it was paid and the question arises what should be done with the charges that now appear upon the books of the Long Beach Gas Company and affiliates. It is clear that it should be eliminated from original cost, which brings us to the question to what account should it be charged?

One suggestion might be that it should be entered in Account 105—Gas Plant Acquisition Adjustments. If it represented amounts actually paid to another company for the purchase of the property at arm's-length bargaining, there might be some basis for the suggestion; but it represents an improper payment which should never have been placed in any capital account and which was no part of the cost of property acquired by the Long Beach Gas Company. It should, therefore, be a surplus charge and a debit made to that account.

There are several precedents for such a determination by the Commission. In a proceeding involving the New York companies in the Associated gas and electric system, the Commission found that the New York State Electric & Gas Corporation had purchased

certain lands and water rights from an affiliate of the system for $6,500,000. These lands and water rights had actually cost but $2,271,667.70 when acquired from outsiders. When the propriety of the transaction was questioned by the Commission, evidence was offered by the New York State Electric & Gas Corporation purporting to show that the property acquired by it had a value in excess of the $6,500,000 purchase price; but the Commission rejected such claim and decided that the company should include in its fixed capital account only an amount equal to the cost of said lands and water rights when first acquired from outsiders, *thus eliminating all profits to affiliates resulting from the transaction.* This determination was reviewed in the courts and the position of the Commission was sustained by the court of appeals (New York State Electric & Gas Corp. v. Maltbie (1935) 243 App Div 655, 277 NY Supp 750; motion for leave to appeal denied 267 NY XXXIX).

Another case involved charges made to operating companies in the Associated gas and electric system by affiliated companies for engineering, purchasing, management, and other alleged services. The Commission directed the operating companies to make no further payments to its affiliates unless such payments were charged directly against profit and loss —surplus, it being the expressed intent of the order that such payments if made should be borne directly and solely by the stockholders of the operating utilities. The companies unsuccessfully appealed this order to the state courts and the matter was twice considered by the court of appeals (once upon injunction [1934] 241 App Div 780, 270 NY Supp 1010, aff'd. [1935] 266 NY 521, 195 NE 182, and once upon certiorari [1935] 245 App Div 131, 9 PUR(NS) 163, 281 NY Supp 384, aff'd. [1937] 274 NY 591, 10 NE(2d) 567, reargument denied [1937] 275 NY 534, 11 NE (2d) 736). An attempt to set aside the order in the Federal courts likewise failed (Long Island Water Corp. v. New York Pub. Service Commission [1938] 23 F Supp 834, 25 PUR (NS) 260, affirmed [1939] 102 F (2d) 453, 29 PUR(NS) 387). The result of these decisions was to sustain the authority of the Commission to require operating companies to charge against surplus payments made to affiliates where proper proof was not offered to justify the reasonableness and propriety of such charge.

The balance sheet of the Long Beach Gas Company after all the adjustments are made which are proposed herein is set forth in the accompanying table. The journal entries to make the required changes as of January 1, 1938, appear in the order submitted herewith.

Adjusted Balance Sheet, January 1, 1938

Assets	
Utility plant—gas	
Gas plant in service	$1,846,461.98
Construction work in progress	17.69
Gas plant held for future use	13,357.18
Gas plant acquisition adjustments	.....
Total Utility Plant	$1,859,836.85
Other physical property	$646.85
Sinking funds	68.85
Total Investment and Fund Accounts	$715.70

Cash	$14,593.10
Special deposits	925.00
Working funds	1,615.48
Accounts receivable	28,188.07
Receivables from associated companies	133.76
Materials and supplies	2,615.91
Prepayments	28,519.30
Total Current and Accrued Assets	$76,590.62
Unamortized debt discount and expense	$140,256.08
Other deferred debits	.....
Total Deferred Debits	$140,256.08
Capital stock expense	$9,782.85
Total Assets	$2,087,182.10

* * *

Liabilities

Common capital stock	$100,000.00
Preferred capital stock	322,500.00
Total Capital Stock	$422,500.00
Long term debt	$844,900.00
Advances from associated companies	$999,230.50
Accounts payable	$30,874.41
Payables to associated companies	38,098.11
Matured interest	925.00
Customers' deposits	54,228.14
Taxes accrued	1,914.89
Interest accrued	8,868.33
Total Current and Accrued Liabilities	$134,908.88
Customers advances for construction	$2,894.07
Reserves for depreciation of gas plant	$16,507.98
Reserve for uncollectible accounts	10,716.48
Other reserves	1,955.13
Total Reserves	$29,179.59
Contributions in aid of construction	$87,954.33
Earned surplus (deficit)	D$434,385.27
Total Liabilities	$2,087,182.10

D—Deficit.

Note: Undeclared 7 per cent cumulative preferred stock dividends amount to $248,325.00.

The Commission has not undertaken in this proceeding to determine whether the adjusted reserve for depreciation ($16,507.98) is adequate or to order the company to increase it to the proper amount. In the rate case, the only testimony presented as to depreciation existing in the property as of January 1, 1938, was that it amounted to $251,565.85, which represented over 13 per cent of the book cost of the property. The adjusted reserve is only a small, almost insignificant, part of the accrued depreciation and represents less than one per cent of the original cost of the gas plant (see Table 1).

[**26**] Obviously, the reserve is woefully deficient and should be increased, but in view of the decision of the courts of this state (see 271 NY 103, 15 PUR(NS) 143, 2 NE(2d) 277; 244 App Div 685, 9 PUR(NS) 155, 281 NY Supp 223), the Commission does not consider that it has authority to compel a company to provide and maintain an adequate reserve. The governor and the Commission have asked the legislature repeatedly for authority to do so, but the recommended change in the law has not been enacted. The Commission has refrained from issuing an order regarding the reserve not because such action should not be taken but because it does not consider that it has authority to do so.

Is the Commission Powerless?

At various places in the record and in his brief, counsel for the company called attention to certain prior orders of the Commission in cases where the company's books had been examined to some extent. These were Cases

Nos. 1940, 1942, and 3927, 22 PUR (NS) 289, all of which originated in 1927 or earlier. The first two related to security issues by the Long Beach Gas Company. Case No. 3927 dealt with, among other things, the acquisition of the stock of the Long Beach Gas Company by the Queens Borough Gas and Electric Company at $342 per share of a par value of $100. In his brief counsel states:

"5. Where the Commission has once issued orders which direct specific entries on the company's books based on the reports of examinations by its accounting or engineering divisions, or authorizes the issuance of securities based upon said reports and examinations, the Commission may not direct thereafter any change or any adjustment or elimination in the fixed capital accounts unless it is shown the changes affect items not previously passed upon (or that the entries were illegal or false)."

If this policy were to be followed, the Commission could issue no revised system of accounts in any way affecting capital or property that existed at the time of a previous order, even for the purpose of reclassification in the manner found desirable by experience or because of progress in public utility operation and regulation. Taken literally, his words would hardly permit of the elimination of items that had been in existence at the date of such order no matter what changes had taken place or what new concepts of regulation had become necessary. There could be no progress in public utility accounting and regulation. A predecessor Commission could bind its successors indefinitely unless fraud or malfeasance in office could be established. The United States Supreme Court can reverse determinations which have stood for years, but under the proposed rule the Commission could not even change accounting entries.

[27] The present proceeding deals primarily with the determination of the original cost of the property used and useful at a recent date. Original cost has been a factor in rate making according to the United States Supreme Court for forty years, but the term was not defined in any of the systems of accounts prior to 1934. It is now defined as the cost to the person first devoting the property to public service. All gas companies under the jurisdiction of the Commission (and others) are required to determine original cost according to this definition, and the courts have held that this Commission has authority to so require (271 NY 103, *supra;* 244 App Div 685, *supra*).

An order requiring the proposed changes in the accounts of the company should issue.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission

v.

Solgas, Incorporated

[Complaint Docket No. 12465.]

Public utilities, § 78 — Status of liquid gas distributors — Petroleum gas.

An oil company's subsidiary, chartered to engage in the manufacture and sale of liquefied hydrocarbon, petroleum, and petroleum gases, but not for public use or as a common carrier, is not a public utility within the contemplation of the Public Utility Law.

(BUCHANAN, Commissioner, dissents.)

[November 18, 1940.]

INQUIRY *to determine whether or not Solgas, Incorporated, should pay penalties for distributing liquid gas without Commission approval; proceeding terminated.*

By the COMMISSION: This matter is an inquiry and investigation upon Commission motion to determine whether or not penalties should be imposed upon respondent, Solgas, Incorporated, because of its failure to obtain Commission approval prior to furnishing gas service to the public at Wallingford Hills, Delaware county. Respondent duly filed an answer denying Commission jurisdiction in the premises and alleging that respondent was not a public utility company and had not in the past and was not presently engaged in rendering public utility service.

Hearing was held on October 26, 1939, and the following facts appear from the record:

Respondent, a corporation, the capital stock of which is wholly owned by Sun Oil Company, was created August 15, 1934, under the laws of the state of Delaware. It is chartered, inter alia, to manufacture, buy, sell, store, trade, and deal in liquefied hydrocarbon and petroleum and petroleum gases of every kind and character whatsoever, and any and all by-products thereof, for any and all purposes and uses; to manufacture, buy, sell, store, trade, and deal in tanks, appliances, equipment, and accessories for use with or utilization of liquefied hydrocarbon and petroleum gases, and to acquire, construct, lease, own, and operate tank wagons, automobile trucks, tank cars, and pipe lines for the transportation of petroleum and all its products and by-products, including but not limited to motor fuels, heating fuels, lubricating oils and greases, liquefied hydrocarbon, and petroleum gases and liquid prepara-

tions, but not, however, for public use nor as a common carrier. On September 12, 1934, respondent registered in the commonwealth of Pennsylvania "to sell, store, trade, and deal in liquefied hydrocarbon and petroleum gases of every kind and character, and tanks, appliances, and equipment for use therefor and to prosecute such business as may be incidental thereto." It has no charter territory and has never secured any certificate of public convenience from this Commission nor from its predecessor the Public Service Commission of the commonwealth of Pennsylvania.

Wallingford Hills is a real estate development of more than 20 houses adjoining the village of Wallingford, Nether Providence township, Delaware county. The land comprising this development was formerly owned by William P. Witham of Swarthmore, who subdivided it, sold building lots and constructed dwellings thereon. All of the streets or driveways in the development were laid out and constructed by Mr. Witham, and are presently owned by him in fee simple and no portion of the development has been dedicated to the public use.

Some time prior to October 16, 1934, respondent installed in Wallingford Hills a gas system known as a natural vaporization "undiluted single propane system." The facilities in this system, which are owned by respondent, consist of one 2,600-gallon and two 1,300-gallon welded steel storage tanks designed for 200-pound working pressure, other regulating appliances necessary for the control of liquid commercial propane and approximately 7,000 feet of 2-inch welded seamless steel tubing used for distribution purposes. The tanks and regulating appliances are located on the surface of a plot of ground donated by Mr. Witham, and the distribution lines proceed from this plot and are located in some instances in the streets or driveways belonging to Mr. Witham, and in other instances on the land belonging to the residents of the development. These distribution lines are attached to customer-owned three-fourth-inch service lines leading to the customer's meters. The facilities owned by respondent represent an investment of approximately $7,500.

On October 16, 1934, respondent began serving propane gas through this system to certain residents of Wallingford Hills with whom it had entered into contract. Liquid propane, which is a byproduct of petroleum oil refinery operation consisting of approximately 83 per cent propane and 17 per cent propylene, is transported by respondent from the refinery as a liquid in pressure tank trucks and is dumped into the storage tanks above referred to and thereafter vaporized. The pressure in the storage tanks is 115 pounds per square-inch gauge, and this pressure is reduced through the regulating appliances at the tanks to 12 pounds per square inch gauge pressure in the mains. This gas is then delivered into the distribution system, and the pressure is subsequently reduced by a regulator located in front of the consumers' meters to 8 ounces per square inch or 14 inches of water. A cutoff valve at the consumers' premises automatically terminates the supply if the pressure drops to 4 ounces per square inch or 7 inches of water. The heating value of a cubic foot of propane (C_3H_8) is 2,572 BTU, and of

propylene (C_3H_6) is 2,332 BTU, with the commercial mixture having a calculated heating value of 2,531 BTU per cubic foot at 60 degrees Fahrenheit and 30 inches of mercury, or normal sea level atmospheric pressure of 14.7 pounds per square inch absolute. As delivered to the user at an 8-ounce pressure the gas has a calculated heating value of approximately 2,617 BTU per cubic foot. Respondent does not employ any persons specifically for its Wallingford Hills operation. This business is being handled by the regular employees of Solgas, Incorporated, together with their other duties in connection with the sale of liquefied gases.

The contracts between respondent and its customers in Wallingford Hills, of which there are presently twenty-three, provide for a scheduled price per hundred cubic feet of gas based on the quantity consumed per month. The contracts further provide that the average price per gallon of liquefied petroleum gas or the equivalent thereof in cubic feet of gas for any calendar month shall never be less than the average of the "National Petroleum News" Quotations on 32–36 degree Oklahoma Dark Gas Oil for that month, plus 2 cents per gallon. This provision, however, may at any time or times be waived by the company. Approximately 2.7 gallons of liquid are required to produce 100 feet of gas delivered to the consumer.

Respondent's bills to its customers in Wallingford Hills have been rendered monthly on the basis of the meter consumption at a flat rate of 18 cents per hundred cubic feet of gas. Payment is due net fifteen days after date of invoice and no deposits are required. Although the customers are billed on the basic cubic feet of gas consumed, respondent's system of consumption accounts are kept on the basis of the number of gallons of liquid petroleum gas supplied. The annual requirement of the Wallingford Hills enterprise is approximately 60,000 gallons, which, converted by using 35.78 cubic feet per gallon at 8-ounce pressure becomes 2,147,000 cubic feet of gas metered annually on the customers' premises. This is approximately equivalent to an annual sale of more than five and one-half million cubic feet of 1,000 BTU natural gas or more than ten and one-half million cubic feet of 520 BTU manufactured gas. The appliances which are typical in customers' residences in Wallingford Hills are kitchen ranges, house heating furnaces, automatic storage water heaters, and basement laundry stoves.

Respondent has, on various occasions, refused applications for service.

The principal question which this case presents is whether, in view of the above stated facts, respondent is a public utility within the contemplation of the Public Utility Law.

Section 2 (17) (a) of Art. I of the Public Utility Law provides as follows:

" 'Public utility' means persons or corporations now or hereafter owning or operating in this commonwealth equipment, or facilities for:

"Producing, generating, transmitting, distributing, or furnishing natural or artificial gas, electricity, or steam for the production of light, heat, or power to or for the public for compensation";

Respondent contends that it does not

fall within the above quoted provisions, and, in our opinion, the facts of record sustain the contention. The facts before us are strikingly similar to those in the case of Paramount Gas Utilities Co. v. Public Utilities Commission (1932) 125 Ohio St 211, 215, 180 NE 897. In that case the Ohio supreme court, affirming a decision of the Ohio Public Service Commission, stated that: "We reach the conclusion on the facts that are not in dispute that the operation contemplated by the gas company here is simply a merchandising operation, and that it cannot be held to be a public utility. In other words, the finding and order made by the Commission must be affirmed." This case is the only court authority closely in point, and it fully supports the conclusion we have reached upon the facts here presented. However, proper determination of the character of a particular service must always rest upon full consideration of each particular situation, and our decision in this case will not constitute a precedent where different facts appear. Respondent is not a public utility subject to our jurisdiction; therefore,

Now, to wit, November 18, 1940, It is *ordered:* That the instant proceeding be and is hereby terminated and the record marked closed.

BUCHANAN, Commissioner, dissenting: This matter is an inquiry and investigation upon Commission motion to determine whether or not penalties should be imposed upon respondent, Solgas, Incorporated, because of its failure to obtain Commission approval prior to furnishing gas service to the public at Wallingford Hills, Delaware county. Respondent duly filed an answer denying Commission jurisdiction in the premises and alleging that respondent was not a public utility company and had not in the past and was not presently engaged in rendering public utility service.

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Respondent contends that it does not fall within the above-quoted provisions for substantially the reasons that the products sold by it to residents of Wallingford Hills is not a gas but a liquid; that even if said product may be deemed to be a gas, it is neither a "natural" gas nor an "artificial" gas within the contemplation of the above-quoted provisions; that it selects its consumers, enters into contract with them, and does not serve all of the prospective customers in a given area; that it does not possess franchises, chartered territory, or the right of eminent domain, and that it does not use any public property in the conduct of its business.

In my opinion the facts of record do not sustain respondent's contentions that it is not engaged in the furnishing

of artificial gas to the public in Wallingford Hills for compensation.

The record demonstrates conclusively that respondent is supplying its patrons in Wallingford Hills with a gas, and not, as respondent argues, with a liquid. No liquid is distributed to the premises of the said patrons but, on the contrary, such liquid propane as is necessary in respondent's operations is placed in respondent's tanks where it is vaporized by means of facilities exclusively owned and controlled by respondent. The resulting gas is the only product of respondent which finds its way into the distribution system or the consumers' service lines.

This service rendered to the residents of Wallingford Hills is not to be confused with what is commonly known as "estate service." In rendering the latter type of service respondent installs tanks at individual residences or estates which are periodically filled with liquid propane. This propane is then vaporized in the tanks by means of the facilities owned and controlled by the consumer and flows therefrom to the point of use through a meter. Such service is fundamentally different from the type of service here under consideration, and is not in any manner involved in the instant proceeding.

I find no merit in respondent's contention that the phrase "artificial gas" as used in Art. I, § 2 (17) (a) is intended to include only manufactured gas, often referred to as "city" or "water" gas, and cannot be construed to include petroleum gases. Respondent has referred to no authority or rule of construction which supports that position, nor am I aware of any. In my opinion, the phrase "artificial gas" in the section in question is used by the legislature in its broadest sense, and is intended to cover all gas by whatever methods and from whatever materials produced which does not emanate from wells. Petroleum gas was a commonly known product, well established as a fuel in competition with other types of gas, and with electricity at the time of the passage of the Public Utility Law, and there is no indication and no reason to suppose that the legislature did not intend to regulate its distribution, or did not consider it as an artificial gas similar to so-called "city" or "water" gas.

Respondent's contention that it renders a purely private service in Wallingford Hills finds no support in the record. In considering the extent and the proffer of service it will be seen that respondent presently serves and is willing to serve anyone in Wallingford Hills whose credit standing and equipment are satisfactory. It is well established that where service rendered by an artificial gas distributor is offered to all those members of the public within a given area who are able to pay the rates prescribed and to meet reasonable conditions relating to equipment, the public is in fact served.

Further, the fact that the business is essentially one of personal contract does not preclude its being a utility. In the case of North Penn Gas Co. v. Cabot (1936) 15 Pa PSC 334, 15 PUR(NS) 23, we held that where written contracts were made covering natural gas service, and only three such contracts were made with Pennsylvania consumers, the service was nevertheless public. Also see Incorporators of Service Gas Co. v. Public

Service Commission (1937) 126 Pa Super Ct 381, 18 PUR(NS) 256, 190 Atl 653.

The other suggestions advanced by respondent relative to franchise and chartered rights, the right of eminent domain, and nonuse of public property, are irrelevant to a determination of its status as a utility. That respondent may not possess these rights and powers nor use public property in the conduct of its business is not conclusive that it is not a public utility. See Pennsylvania Chautauqua v. Public Service Commission, 105 Pa Super Ct 160, PUR1932D 145, 160 Atl 225.

It has been held in cases too numerous to require citation that a business may be a public utility, although having no franchise rights, chartered territory, or right of eminent domain, and making no use of public property or thoroughfares.

In my opinion, the case of Re Wisconsin Rapids Gas Co. PUR1933C 375, 376 was well decided by the Wisconsin Public Service Commission. There a corporation applied to the Commission for a certificate of public convenience to furnish public utility gas service by vaporizing liquefied propane into a gas at a central plant and distributing it to consumers in the surrounding territory. In granting the certificate the Commission said:

"Consumers remote from the gas mains within the city and other communities near Wisconsin Rapids will be supplied from individual tanks which will be located underground, and which will be filled periodically from a tank truck. The truck will get the gas from the central plant at Wisconsin Rapids. In some cases, as in rural territory, this service will resemble what is now known as bottled gas service in that an individual tank may be furnished for each customer, although from the customers' point of view, the service will be exactly the same as that furnished by the regular gas utility in that meters will be read monthly and bills rendered for the amount of gas which has been furnished. However, in a number of instances, a single tank may be provided for an entire village or unincorporated community and a small main system provided. In this case the service would undoubtedly be considered to be public utility service. This Commission is not empowered to give, and there is no necessity for the company to obtain a certificate for nonutility service. It is expected that utility service will be given wherever it is justified by local conditions. The certificate of authority, therefore, should permit the giving of utility service throughout the area described and the dividing line between utility and nonutility service need not be drawn at this time."

The case of Paramount Gas Utilities Co. v. Public Utilities Commission (1932) 125 Ohio St 211, 180 NE 897, in which the supreme court of Ohio held that an Ohio company rendering service somewhat similar to that of respondent was not a public utility is not in point. This case is not persuasive, since the Ohio court did not set forth substantial reasons for its holding, and because the case was decided under the Ohio regulatory statute, the relevant sections of which significantly differ in wording from the corresponding sections of the Public Utility Law of Pennsylvania.

Since the instant inquiry and investigation, as issued, specifically applied to the service of respondent at Wallingford Hills, the above discussion has been limited to that service. However, the record shows that nine consumers in a community designated as Carroll Park, Delaware county, have been served since approximately 1936 through a 2,000-foot distribution system under the conditions governing the service to Wallingford Hills. This situation, of course, offers a further indication of the public character of respondent's service.

Where service supplied by any corporation to the public clearly falls within the legislative definition of a public utility in the Public Utility Law, it is not within the province of this Commission to deny jurisdiction over such public utility simply because it does not want to take jurisdiction of the particular subject matter or because it will cause additional work, time, and expense to the Commission. On the contrary, the duty is mandatory upon the Commission to carry out the direction of the legislature as expressed in the act, and to defend to the limit the jurisdiction so conferred so long as the legislature permits it to exist. If it should develop that the legislative definition was too broad, or impractical, or imposes unnecessary burdens upon the Commission, it is a matter for the legislature to correct, because the scope of the law is in its particular province. It is not the function of the Commission, nor has it any authority, to refuse arbitrarily to perform the legislative mandate.

It is my opinion that the service rendered by respondent falls clearly within the definition of a public utility in the Public Utility Law; that there is a furnishing of artifical gas to the public for compensation and, therefore, the respondent is subject to the jurisdiction of the Commission. I believe we should take such jurisdiction and supply such regulation as is necessary according to the law and the public interest until the legislature in its discretion decides otherwise.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Re Philadelphia Transportation Company

[Application Docket No. 59864.]

Street railways, § 15 — Abandonment of tracks — Repaving of highway.

A street railway company, in the absence of any franchise agreement to the contrary, is under a common law duty to remove the rails and repave the highway upon abandonment of its tracks.

[January 6, 1941.]

APPLICATION *for approval of abandonment of street railway service and abandonment of a crossing at grade and construction of a partial crossing at grade; granted subject to conditions.*

By the COMMISSION: This matter comes before us upon application of Philadelphia Transportation Company for our approval of the abandonment of street railway service from a point on Lansdowne avenue east of Haverford avenue to a terminal loop on private right of way west of Haverford avenue, and the substitution therefor of a new terminal loop on private right of way east of Haverford avenue in the city of Philadelphia. In connection with the proposed relocation of street railway facilities, applicant requests approval of the abandonment of a crossing at grade on Lansdowne avenue west of Haverford avenue, and the construction of a partial crossing at grade on Lansdowne avenue east of Haverford avenue.

At the hearing in this proceeding, applicant amended § 5 of its petition which relates to the proposed crossing changes to request the elimination of two half crossings at grade across Lansdowne avenue west of Haverford avenue, and of one full crossing at grade across Haverford avenue, and the construction of two half crossings at grade across Lansdowne avenue, east of Haverford avenue, in lieu of the crossing changes described in its original application. However, it appears that the two tracks crossing Lansdowne avenue west of Haverford avenue comprise one half crossing and our order will so indicate.

Philadelphia Transportation Company operates a coördinated street railway and bus transportation system in the city of Philadelphia and vicinity. As a part of this system, applicant presently operates a street railway line known as Route No. 31 west on Lansdowne avenue, crossing Haverford avenue at grade to a terminal loop on private property west of this intersection. Applicant desires to substitute a new terminal loop on private right of way east of Haverford avenue and to abandon its track and facilities west of the new terminal loop. Applicant states that the present loop is located on property owned by the Fairmount Park Commission, and rented by the applicant for the sum of $500 a year, and that the proposed new loop will also be located on property of the Fairmount Park Commission and will be rented for the same amount. It is further averred that there are no other property owners in the immediate vicinity of the proposed relocation of street railway facilities, and that no passengers will be inconvenienced by the relocation of the facilities.

At the hearing a witness for the applicant testified that the elimination of the crossing at grade at the intersection of Lansdowne avenue, State Highway Route No. 67036, and Haverford avenue, State Highway Route No. 67035, at which point considerable vehicular traffic intersects and turns, will remove a traffic hazard. Witness further testified that the proposed relocation of tracks will eliminate the danger due to insufficient clearance for vehicles between the eastbound track and the south curb on Lansdowne avenue at and immediately east of Haverford avenue.

Witness for the applicant submitted as Exhibit No. 1 answers to a questionnaire directed to the company prior to the hearing. This exhibit indicates that the total length of track to be abandoned is 2,317 lineal feet, which includes 1,440 feet of track on private property and 877 feet in pub-

lic highway. The track in public highway consists of 223 feet of single track with a paved track area 9 feet wide and 327 feet of double track with a paved track area 18.44 feet wide. The exhibit indicates that the applicant, at its own cost and expense, proposes to remove its rails, ties, poles, wires, and overhead structures on private property immediately following abandonment. None of the poles to be removed are used by other utilities.

The original cost of the facilities to be abandoned is as follows:

Track work	$16,694
Buildings	2,686
Electrical work	2,015
Total	$21,395

Applicant's Exhibit No. 1 indicates that this amount will be charged against the reserve for depreciation to record the abandonment.

Exhibit No. 1 further indicates that the applicant, at its own cost and expense, will construct the proposed new terminal loop, including a tangent spur for emergency purposes, and two half crossings, consisting of 514 feet of single track (160 feet in public highway and 354 feet on private property), necessary poles and overhead facilities, and will pave the new track area within the limits of Lansdowne avenue. The cost of the new construction is estimated as follows:

Track work and paving	$7,190
Poles and overhead	880
Sand house, toilet, lights	3,000
Total	$11,070

Applicant further states that no other utilities will be affected by the proposed relocation and that the new loop will be constructed and completed prior to the abandonment of the present terminal.

Applicant proposes to leave the rails and ties located in paved streets in place until public authorities repave the streets, at which time the applicant proposes, at its own cost and expense, to remove its rails and ties and repave the track area. In the absence of any franchise agreement to the contrary, a street railway company is under a common-law duty to remove the rails and repave the highway upon abandonment of its tracks. West Penn R. Co. v. Public Utility Commission (1940) — Pa Super Ct —, 36 PUR(NS) 116, 15 A(2d) 539, 544. Since there is no evidence of any franchise under which applicant operated which relieves it of its common-law duty, we shall require applicant to fulfill its obligations by removing the rails and repaving the disturbed area.

After full consideration of the matters and things involved, we are of the opinion and find that the abandonment of street railway service by Philadelphia Transportation Company on a portion of its Route No. 31 from a point east of Haverford avenue on Lansdowne avenue to a terminal loop on private right of way west of Haverford avenue, the abolition of a half crossing at grade across Lansdowne avenue west of Haverford avenue, the abolition of a crossing at grade across Haverford avenue, and the construction of two half crossings at grade across Lansdowne avenue east of Haverford avenue, as indicated on the plan accompanying the application, is necessary or proper for the service, accommodation, convenience, or safety of the public; therefore,

Now, to wit, January 6, 1941, it is *ordered:*

1. That the application be and is hereby granted.

2. That a certificate of public convenience issue at A. 59864, evidencing approval of the discontinuance of street railway service and abandonment of facilities from a point on Lansdowne avenue east of Haverford avenue to the present terminal loop on private right of way west of Haverford avenue, and of the installation of relocated street railway facilities and the operation of trolley cars over the new terminal loop on Lansdowne avenue east of Haverford avenue in the city of Philadelphia.

3. That the half crossing at grade of tracks of Philadelphia Transportation Company across Lansdowne avenue west of Haverford avenue, be and is hereby abolished.

4. That the crossing at grade of two tracks of Philadelphia Transportation Company across the intersection of Lansdowne avenue and Haverford avenue be and is hereby abolished.

5. That the construction of two half crossings at grade of one track of Philadelphia Transportation Company across Lansdowne avenue west of Haverford avenue be and is hereby approved.

6. That the applicant, at its own cost and expense, remove all poles, wires, and overhead construction within the limits of the abandonment, not utilized in connection with the operation of applicant's relocated facilities.

7. That applicant, at its own cost and expense, remove all rails, ties, and appurtenances in public highways or streets within the limits of the abandonment, and repave the disturbed area with materials similar to that in the adjacent street paving.

8. That applicant install track and auxiliary construction and repave the track area in Lansdowne avenue at the relocated loop terminal.

9. That applicant relinquish all franchise rights permitting the operation of street railway service on portion of street where track is removed.

10. That all work herein ordered be completed in a manner satisfactory to the Commission on or before May 31, 1941.

SECURITIES AND EXCHANGE COMMISSION

Re Commonwealth & Southern Corporation et al.

[File No. 59-8, Release No. 2626.]

Intercorporate relations, § 19.5 — Holding company system — Geographical integration.

1. The standard established by Clause (B) of § 11(b) (1) of the Holding Company Act, 15 USCA § 79k (b) (1), it is tentatively concluded, means that a holding company may continue to control an integrated pub-

lic utility system or systems additional to the "single" integrated public utility systems only if all such additional system or systems are located in the same state or states in which the "single" system is located, or in states adjoining thereto, p. 42.

Intercorporate relations, § 19.4 — Holding company systems — Geographical integration — Single system — Size limitation.

2. No substantial amount of property, it was tentatively concluded, might be retained, consistently with the size limitation of § 2(a) (29) and Clause (C) of § 11(b) (1) of the Holding Company Act, under common control with a large company (single integrated public utility system) in a holding company system when such a company served an area over the major part of the states served, p. 44.

Intercorporate relations, § 19.4 — Holding company systems — Integrated utilities — Separate properties — Interconnection.

3. Properties in a holding company system, when widely separated and not interconnected or coördinated with each other, it was tentatively concluded, could not be retained under common control consistently with the statutory requirements of localized management, efficient operation, and effective regulation under § 11(b) (1) of the Holding Company Act, p. 44.

Intercorporate relations, § 19.5 — Holding company systems — Single integrated system — Independent operation.

4. Properties of members of a holding company system, it was tentatively concluded, could not qualify for retention as an "additional system" to those of a single integrated system or as additional systems to each other, under the limitations imposed by Clause (A) of § 11(b) (1) of the Holding Company Act, where they were operated separately and not coördinated in their physical operations and the only common element of operation was the fact that each of these companies obtained service from the same service company and was controlled by the same holding company, p. 45.

Intercorporate relations, § 19.6 — Holding company systems — Integration — Other businesses.

5. Transportation, water, ice, heating, and other businesses (other than electric or gas utilities) were held not to be reasonably incidental or economically necessary or appropriate to the operations of any of the electric or gas utility properties controlled by a holding company system or by any of its subsidiaries and, therefore, not possible of retention within the system of a registered holding company under § 11(b) (1) of the Holding Company Act, p. 46.

Intercorporate relations, § 19.6 — Holding company systems — Integrated system — Other businesses — Mutual service company.

6. The business of a mutual service company rendering services to all of the various subsidiary companies of a holding company system is not reasonably incidental or economically necessary or appropriate to the operations of any of the utility properties, under § 11(b) (1) of the Holding Company Act, where the various subsidiary companies cannot be retained under such common ownership, p. 46.

[March 19, 1941.]

PROCEEDING *under § 11 of the Holding Company Act to effectuate simplification of a holding company system; tentative conclusions stated and hearing reconvened.*

By the COMMISSION: Pursuant to respondents' request and the Commission's undertaking in its opinion dated June 1, 1940, there are set forthwith hereinafter the tentative conclusions of the Commission as to the action which the respondents should take under the provisions of § 11(b) (1) of the Public Utility Holding Company Act of 1935, 15 USCA § 79k (b) (1). In view of the fact that these conclusions are expressed prior to the taking of testimony, as a result of the request of the respondents made at the outset of the hearing, the views here expressed must of necessity be entirely tentative in character.

To aid the Commission in arriving at its conclusions, the Commission directed its staff to prepare a report setting forth informative data with respect to the holding company system of the Commonwealth & Southern Corporation and suggesting the application of the pertinent provisions of the act. Such a report has been prepared and has been filed as a part of the public proceedings in this case; copies of the report will be furnished to the respondents simultaneously with the issuance of this statement.

I

Applicable Statutory Provisions

For convenience, we repeat here the full text of the principal statutory provisions applicable to the present proceedings.

Section 11(b) (1) of the act, *supra*, provides:

"(b) It shall be the duty of the Commission, as soon as practicable after January 1, 1938:

"(1) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such action as the Commission shall find necessary to limit the operations of the holding company system of which such company is a part to a single integrated public utility system, and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public utility system: Provided, however, that the Commission shall permit a registered holding company to continue to control one or more additional integrated public utility systems, if, after notice and opportunity for hearing, it finds that—

"(A) Each of such additional systems cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system;

"(B) All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

"(C) The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation.

"The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public utility systems the retention of an interest in any business (other than the business of a public utility company as such) which the Commission shall find

necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems."

Section 2(a) (29), 15 USCA § 79b (a) (29), is as follows:

"(29) 'Integrated public utility system' means—

"(A) As applied to electric utility companies, a system consisting of one or more units of generating plants and/or transmission lines and/or distributing facilities, whose utility assets, whether owned by one or more electric utility companies, are physically interconnected or capable of physical interconnection and which under normal conditions may be economically operated as a single interconnected and coördinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation; and

"(B) As applied to gas utility companies, a system consisting of one or more gas utility companies which are so located and related that substantial economies may be effectuated by being operated as a single coördinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation: Provided, that gas utility companies deriving natural gas from a common source of supply may be deemed to be included in a single area or region."

Interpretation of Clause (B).

[1] In our statement of tentative conclusions issued January 18, 1941, in the proceedings similar to this involving the United Gas Improvement Company,[1] we tentatively concluded that the standard established by Clause (B) of § 11(b) (1) meant that a holding company might continue to control an integrated public utility system or systems additional to the "single" integrated public utility system referred to in § 11(b) (1) *only* if all such additional system or systems are located in the same state or states in which the "single" system is located, or in states adjoining thereto.[2] We follow this tentative conclusion as to the interpretation of Clause (B) and have used it in reaching the tentative conclusions hereafter set forth with respect to the holding company system of the Commonwealth & Southern Corporation.

II

The Proceedings to Date

The Commonwealth & Southern Corporation registered as a holding company under the Public Utility Holding Company Act of 1935 on March 25, 1938. On March 6, 1940

[1] Re United Gas Improv. Co. (1941) File No. 59-6, Holding Company Act Release No. 2500, 37 PUR(NS) 91.

[2] Some of the considerations upon the basis of which the Commission reached the tentative conclusions then adopted were set forth in a memorandum dated January 8, 1941, to the Commission from the Public Utilities Division, which memorandum was made public at the time of the issuance of our statement of tentative conclusions in the United Gas Improvement Company matter (Holding Company Act Release No. 2500, *supra*); copies of this memorandum are available on request.

we issued a notice of and order for hearing pursuant to § 11(b) (1) of the act with respect to the Commonwealth & Southern Corporation and its subsidiary companies. We then stated that it appeared that the Commonwealth & Southern Corporation holding company system was not confined in its operations to those of a single integrated public utility system and to such other businesses as were reasonably incidental or economically necessary or appropriate to the operations of such a system within the meaning of the act.

Subsequent thereto, the Commonwealth & Southern Corporation and various of its subsidiary companies requested that they be furnished with a statement of the Commission setting forth the Commission's tentative conclusions with respect to what action the Commission tentatively believed would be required by § 11(b) (1) of the act. The respondents' request was similar to that made by the respondents in the similar proceeding involving the United Gas Improvement Company, and the Commission, by memorandum opinion filed June 1, 1940 (Holding Company Act Release No. 2083), stated that it would grant the request in the same manner as it had undertaken in the United Gas Improvement Company matter.[3] The proceedings have been held in abeyance pending the preparation and issuance of the Commission's statement of tentative conclusions.

III

Application of Statutory Standards

The notice of and order for hearing in itself shows that the present holding company system of the Commonwealth & Southern Corporation is engaged in extensive electric and gas operations in a number of states scattered in different parts of the United States. The extent to which these operations are scattered is particularly shown by the maps included in that notice, and the nature and character of the operations are described in more detail in the staff report. Various nonutility businesses are also conducted by certain of the subsidiaries of the Commonwealth & Southern Corporation.

In the light of the facts as they now appear to us we proceed to set forth our tentative conclusions as to the application of the statutory standards to the Commonwealth & Southern Corporation and its subsidiary companies.

Effect of Clause (B) of § 11(b) (1).

The interpretation which we have tentatively adopted of Clause (B) of § 11(b) (1)[3a] necessitates the following conclusions:

(a) If one or more of the properties of Consumers Power Company (located in Michigan) is considered as the "single" system, there cannot be retained under common control therewith any of the southern properties of the holding company system (i. e., any of those located in Mississippi, Alabama, Georgia, Florida, or South Car-

[3] For Commission's views as to the considerations leading to the issuance of this statement, see Re United Gas Improv. Co. (1940) Holding Company Act Release No. 2065, 33 PUR(NS) 285.

[3a] Requiring that all additional systems be located in states adjoining the state where the "single" system is located; see Re United Gas Improv. Co. footnote 1, *supra*.

olina) nor any of the properties located in Illinois or Pennsylvania.

(b) If one or more of the properties of Alabama Power Company is considered as the "single" system, there cannot be retained any of the Northern properties of the holding company system (i. e., any of those located in Michigan, Illinois, Ohio, or Pennsylvania) nor any of the properties located in South Carolina.

(c) If one or more of the properties of Georgia Power Company is considered as the "single" system, there cannot be retained under common control therewith any of the northern properties of the system nor any property located in Mississippi.

(d) Properties of Ohio Edison Company located in the neighborhood of Akron and Youngstown, Ohio, are interconnected with and from a single integrated public utility system with the electric properties of Pennsylvania Power Company. Consequently, since the Pennsylvania properties may not be retained under common control with any property located in Michigan, the eastern properties of Ohio Edison Company may not be retained under such control within the requirement of Clause (B), unless they are separated from the Pennsylvania properties, a result which would not appear to be economically sound.

Application of size standard of § 2 (a) (29) and Clause (C) of § 11 (b) (1).

[2, 3] Under the size limitation contained in § 2(a) (29) and in Clause (C) of § 11(b) (1) no single integrated pubilc utility system, nor any combination of such systems permitted to be retained under common control, may be "so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, and the effectiveness of regulation." We do not deem it necessary at this time to suggest tentative conclusions as to whether the properties now owned and operated either by Consumers Power Company, Alabama Power Company, or Georigia Power Company, are as to any one of these respective states, too large for localized management, efficient operation, or effective regulation. We believe it suffices for the present purpose to reach the tentative conclusion that each of these statewide areas either exceeds, or in any event approaches, the maximum size which can be so retained consistently with the statutory requirements. In this connection it may be observed that each of these three companies serves an area over the major part of the states served. Even within such areas it may be difficult to find that management can be localized, or to conclude that regulation can be effective over companies which dominate whole states. In any event, we conclude that no substantial amount of utility property may be retained under common control with properties now constituting either those of Consumers Power Company, Alabama Power Company, or Georgia Power Company.

If our tentative conclusion on this point stands, the effect will be to make impossible the retention under common control with Consumers Power Company any of the other properties of the holding company system, or the retention under common control with any of the properties of Alabama Power

Company, either any of the northern properties or any property now owned by Georgia Power Company[4] or South Carolina Power Company. Similarly, there could not be retained under common control with the properties of Georgia Power Company either any of the northern properties or any properties of Alabama Power Company, Mississippi Power Company, or Gulf Power Company. We leave open for further consideration the question of whether any of the properties now owned by Mississippi Power Company or by Gulf Power Company might be retained under common control with any of the property now owned by Alabama Power Company; similarly we leave open for further consideration the question of whether any property now owned by South Carolina Power Company may be retained under common control with any property owned by Georgia Power Company.

The various properties of Central Illinois Light Company, Southern Indiana Gas and Electric Company, and the two separated properties of Ohio Edison Company (the Akron-Youngstown area and the Springfield area) are widely separated to distance and are not coördinated with each other. We tentatively conclude because of the distances separating these properties and the lack of present interconnection or coördination between them, no combination of any of these properties may be retained under common control consistently with the statutory requirements of localized management, efficient operation, and effective regulation.

Application of Clause (A) of § 11 (b) (1).

[4] Under the provisions of Clause (A) of § 11(b) (1) no additional system can be retained under common control with the "single" system unless such additional system "cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system." Consumers Power Company, Central Illinois Light Company, Southern Indiana Gas and Electric Company, Ohio Edison Company, and Pennsylvania Power Company each have their own officers. With the exception of the Pennsylvania-Ohio interconnected system, they are operated separately and are not coördinated in their physical operations. The only common element of operations is the fact that each of these companies obtains service from the same service company and is controlled by the same holding company. Similarly, the Springfield Division of the Ohio Edison Company operates separately and is neither interconnected nor operated with the remaining property of that company.

Under these circumstances we tentatively conclude that neither the properties of Central Illinois Light Company, Southern Indiana Gas and Electric Company, the Springfield Division of Ohio Edison Company, the interconnected Pennsylvania-Ohio proper-

[4] A minor exception to this conclusion involves the Credille property owned by Georgia Power Company and located in Georgia which is interconnected with and operates with the properties of Alabama Power Company; another possible exception involves the gas property located in Phenix City, Alabama, which is interconnected with and operates on a coördinated basis with the Columbus City gas property of the Georgia Power Company.

ty, nor the Akron-Youngstown Division of Ohio Edison Company, nor Pennsylvania Power Company considered separately, could qualify for retention as an "additional system" to those of Consumers Power Company, or as additional systems to each other (except as to the interconnected Pennsylvania-Ohio group) under the limitations imposed by Clause (A) of § 11(b) (1).

For the purposes of this statement we do not deem it necessary to consider the application of Clause (A) to any of the southern properties of the holding company system.

Other businesses.

With the consent of the respondents we have already directed Tennessee Utilities Corporation to sell the various transportation and other properties which it owns, such sale to be completed on or before July 1, 1942.

[5] The General Corporation and Transportation Securities Corporation conduct, either directly or through subsidiaries, ice, transportation, and other businesses located in various states. Certain of the utility subsidiaries of the holding company system also themselves operate, either directly or through subsidiaries, certain transportation, water, ice, heating, and other businesses other than electric or gas utilities. We conclude that none of such businesses are reasonably incidental or economically necessary or appropriate to the operations of any of the electric or gas utility properties controlled by the holding company system or by any of its subsidiaries, and are therefore not possible of retention within the holding company system of a registered holding company.

[6] The Commonwealth & Southern Corporation (New York) is a mutual service company rendering services to all of the various subsidiary companies of the holding company system. In view of the conclusions hereafter reached, we conclude that the business of this service company, as presently constituted, is not reasonably incidental or economically necessary or appropriate to the operations of any of the utility properties.

Tentative conclusion as to holding company.

Summarizing the foregoing, we conclude tentatively that, if the property of Consumers Power Company is considered as the "single" integrated public utility system, the Commonwealth & Southern Corporation can retain no other properties; that if the "single" system is located in Alabama, no other properties can be retained with the possible exception of those located in Mississippi and Florida; and that if the "single" system is located in Georgia, no other properties can be retained with the possible exception of those in South Carolina. From this it would seem to follow that the Commonwealth & Southern Corporation cannot continue to control more than one of its major units of property.

V

Order Reconvening Hearing

It is hereby *ordered* that:

1. The hearing heretofore commenced in this proceeding shall be reconvened on April 3, 1941, at 10 o'clock in the forenoon of that day at the offices of the Securities and Exchange Commission, 1778 Pennsylvania avenue, N. W., Washington, D.

C., in such room as may be designated on such date by the hearing room clerk in room 1102, before the officer of the Commission heretofore designated to preside at the hearing previously commenced, or before such other officer as the Commission may hereafter designate. The officer so designated to preside at such reconvened hearing is hereby authorized to exercise all the powers granted to the Commission under § 18 (c) of said act, 15 USCA § 79r (c), and to a trial examiner under the Commission's Rules of Practice.

2. At the outset of said hearing, to be reconvened as aforesaid, the respondents and other parties in interest shall be given an opportunity to be heard with respect to the statements of fact contained in the aforesaid report of the Public Utilities Division, heretofore filed as part of the public proceeding in this case, and all such persons shall have an opportunity and are invited to state at that time any differences which they may have with respect to any of the facts contained in said report of the Public Utilities Division, and all such persons shall have an opportunity to be heard with respect to the allegations contained in paragraphs 1 to 47, inclusive, of the aforesaid order of March 6, 1940.

3. At such time the respondents shall state what properties they believe constitute the "single integrated public utility system" to the operations of which they believe their holding company system should be limited, as provided in § 11(b) (1) of the Public Utility Holding Company Act of 1935, and said respondents shall also state what other systems, if any, they claim to be entitled to retain as additional systems pursuant to the proviso embodied in Clauses (A), (B), and (C) of said § 11(b) (1), and shall state what other businesses they claim are reasonably incidental or economically necessary or appropriate to the operations of such integrated public utility systems as said respondents wish to retain.

4. At such time said respondents and all other parties in interest shall be given an opportunity to be heard for the purpose of showing cause why an order should not be entered pursuant to § 11(b) of said act, requiring:

(a) The divestment of control by the Commonwealth & Southern Corporation of either:

(1) Its northern properties, comprising all of its utility assets located in the states of Michigan, Illinois, Indiana, Ohio, and Pennsylvania; or

(2) Its southern properties, comprising all of its utility assets located in the states of Mississippi, Alabama, Florida, Georgia, and South Carolina;

(b) The divestment of control by the Commonwealth & Southern Corporation of all of the utility assets owned by Central Illinois Light Company and of the utility assets comprising the interconnected electric facilities owned by Ohio Edison Company and Pennsylvania Power Company;

(c) The divestment of control by the Commonwealth & Southern Corporation, if, pursuant to Clause (1) of paragraph (a) above, it divests itself of its Northern properties, also of either:

(1) the utility assets owned by Alabama Power Company, Mississippi Power Company, and Gulf Power Company; or

(2) the utility assets owned by

Georgia Power Company and South Carolina Power Company.

5. At such time consideration will also be given, and respondents and all other parties in interest shall have an opportunity to be heard, with respect to the time and manner for disposition of any other issues presented in these proceedings.

It is *further ordered* that the secretary of the Commission shall serve notice of the said reconvened hearing by mailing a copy of this order, together with a copy of said report of the Public Utilities Division dated March 10, 1941, by registered mail to the Commonwealth & Southern Corporation, to each of the attorneys of record herein and to each of the interveners herein, and that notice of the reconvening of said hearing is hereby given to the said respondents and interveners and to all other persons, including the security holders and consumers of the said respondents, to all states, municipalities and political subdivisions of states within which are located any of the utility assets of any of the companies of the Commonwealth & Southern Corporation holding company system, or under the laws of which any of the respondents are incorporated, to all state Commissions, state securities commissions, and all agencies, authorities, or instrumentalities of one or more states, municipalities, or other political subdivisions having jurisdiction over any of the businesses, affairs, or operations of any of them, such notice to be given by publication of this order in the Federal Register and by publication of this order as a general release, distributed to the press and mailed to the mailing list of releases issued under the Public Utility Holding Company Act of 1935.

It is *further ordered* that jurisdiction be and is hereby reserved to separate, either for hearing, in whole or in part, or for disposition, in whole or in part, any of the issues or questions which may arise in these proceedings, and to take such other action as may appear conducive to an orderly and economic disposition of the issues involved.

NEW JERSEY BOARD OF PUBLIC UTILITY COMMISSIONERS

Jersey Central Power & Light Company

v.

Tri-County Rural Electric Company, Incorporated

Public utilities, § 58 — Coöperative association — Public interest — Borrowing of public funds.

1. The power of a coöperative association furnishing electric light, heat, and power service to borrow from and to issue evidences of indebtedness

to the general public, involves a public interest so as to bring such company within the purview of the Public Utility Act and consequent jurisdiction of the Commission, p. 52.

Public utilities, § 58 — Coöperative association — Public interest — Financial stability.

2. The financial stability of a coöperative association that enters upon and gains privileges in the public highways involves a public interest bringing the association within the scope of the Public Utility Act and consequent jurisdiction of the Commission, since such stability relates to its ability to maintain its structures thereon in safe and proper conditions, p. 52.

Public utilities, § 58 — Coöperative associations — Service to bodies politic — Public interest.

3. There is a public interest in the rates charged to and paid by bodies politic served by a coöperative electric association so as to bring the company within the scope of the Public Utility Act and consequent jurisdiction of the Commission, p. 52.

Public utilities, § 14 — What constitutes — Public interest in service.

4. The statute providing that it shall be unlawful for an electric company to refuse to serve customers unless they are indebted to the company recognizes a public interest in the supply of electric energy by such a company, p. 53.

Public utilities, § 48 — Tests of status — Poles and wires — Public interest.

5. The entry by an electric coöperative association upon the public highways and places to erect poles and structures involves the acquisition of special privileges in the grant of which there is a public interest, p. 53.

Public utilities, § 14 — Tests of status — Maintenance of property and equipment — Public interest — Statutory regulation.

6. There is a public interest in the safe service and in the maintenance of property and equipment in condition to perform such service as required of electric companies by the Public Utility Act, p. 54.

Mutual companies, § 2 — Jurisdiction of Commission — Construction.

7. The Board of Public Utility Commissioners has jurisdiction and regulatory control sufficient to prevent a coöperative association from entering upon service anywhere in the state, irrespective of whether the area to be served is adequately and properly served by an existing company, p. 55.

Monopoly and competition, § 2 — Statutory regulation — Adequacy of existing service.

8. The Public Utility Act gives effect to the rule that where a public utility is serving an area or is ready and willing to serve an adjoining area with safe, adequate, and proper service at just and reasonable rates another public utility should not be permitted to enter such area, p. 55.

Public utilities, § 12 — Public use — Legislative intent.

9. The Public Utility Act was designed to set up a broad and inclusive scheme of regulation and the words "public use" were used to exclude only operations that were wholly private; operations in which no public interest was involved, p. 55.

Statutes, § 11 — Public Utility Act — Construction.

10. The Public Utility Act is a remedial act and should be liberally construed in the protection of the public interest, p. 55.

Commissions, § 28 — Jurisdiction — Legal questions — Coöperative associations — Creation.

11. Whether a coöperative association furnishing electric light, heat, and power service is properly organized under the statute relating to "Corporations, General" and whether it has properly acquired under that act the right to erect poles upon the public highways and places is a purely judicial question and cannot be decided by the Commission, p. 56.

Public utilities, § 22 — Franchises — Coöperative associations — Acceptance of privileges.

12. The acceptance by a coöperative association, furnishing electric service, of special franchises and privileges enabling it to enter upon and locate poles and wires upon and along the public highways involves recognition of the fact that it operates its equipment for public use in the conduct of a business that is of a public character, p. 58.

Public utilities, § 58 — Coöperative associations — Service to bodies politic — Commission jurisdiction.

13. A coöperative association furnishing electric service must, in serving religious membership corporations, be regarded as serving them as consumers, and thereby engaged in rendering service "to and for the public" and operating for public use so as to bring it within the purview of the Public Utility Act, and the consequent jurisdiction of the Board, p. 59.

Public utilities, § 14 — Acceptance of Federal funds — Commission jurisdiction — Coöoperative associations.

14. The grant to, and acceptance by, a coöperative association furnishing electric service, of loans of Federal funds, indicate that the association operates "for public use" so as to bring it within the purview of the Public Utility Act and the consequent jurisdiction of the Board, p. 59.

[February 6, 1941.]

HEARING *and order requiring coöperative association to show cause why it should not be enjoined from serving certain area; motion to dismiss for want of jurisdiction denied.*

APPEARANCES: Joseph F. Autenrieth, for Jersey Central Power & Light Company; Herman H. Anekstein, Marvin F. Hartung, and Edith Hertz, for Tri-County Rural Electric Company, Inc.

By the COMMISSION:

Preliminary

The Jersey Central Power & Light Company, hereafter referred to as the Jersey Central Company, is a public utility of this state as defined by the statutes of this state (Rev Stats 48:2-13). Incorporated under the laws of this state, it is a corporation operating, managing, and controlling within this state an electric light plant for public use, under privileges granted by this state. It is subject to, recognizes and acts under, the regulatory jurisdiction of the Board.

The Jersey Central Company filed its petition with this Board invoking as against Tri-County Rural Electric Company, Inc., hereafter referred to as Tri-County Company, the power

vested in this Board by Rev Stats 48:7–5.

The statutory provision so invoked is as follows:

"Determination of disputes as to territories served. The Board of Public Utility Commissioners shall have power, after hearing upon notice, to determine *between public utilities* supplying electric light, heat, or power, questions in dispute as to territories to be served. Pending the hearing the Board may enjoin the construction of facilities for such supply.

"Upon finding and determination that the construction *is not necessary and proper for the public convenience and will not properly conserve the public interest,* the Board may issue orders prohibiting it."

The petition of the Jersey Central Company, among other things, alleged the Tri-County Company to be a public utility as defined by Rev Stats 48:2–13; that Jersey Central was and for many years had been serving consumers residents in "Browns Mills"; that it was preparing on applications made to it to furnish service to residences on Hydranga street and Laurel avenue in Browns Mills and that Tri-County Company was "invading" this territory.

The petition prayed that an order be made "fixing a day for hearing, and requiring the Tri-County Rural Electric Company, Inc., to show cause . . . why it should not be enjoined and restrained from entering the territory of Browns Mills . . . and that its territorial rights as to service and distribution to the public of the supply of light, heat, and power in the township of Pemberton in which Browns Mills is located be fixed and determined as between it and the Tri-County Rural Electric Company, Inc."

The petition prayed a stay of construction of facilities by Tri-County Company pending hearing and determination.

This Board, on the filing of the petition, issued an order to show cause and a temporary stay. The Tri-County Company filed a special appearance and a motion to vacate the Board's order and to dismiss the petition of the Jersey Central Company for lack of jurisdiction over the subject matter of the petition and over the Tri-County Company and filed an answer reserving such special appearance.

Testimony was taken. The motion of the Tri-County Company to dismiss the petition of the Jersey Central Company for want of jurisdiction and the issue on the merits were taken into conference by this Board.

I

This Board proceeds first to consider the Tri-County Company's special appearance and its motion to dismiss the petition of the Jersey Central Company for want of jurisdiction.

The special appearance and motion of the Tri-County Company are based upon the ground—

(a) That the jurisdiction of the Board extends only to (Rev Stats 48:2–13) a corporation "that now or hereafter may own, operate, manage, or control within this state any . . . electric light, heat, (or) power system, plant, or equipment *for public use,* under privileges granted or hereafter to be granted by this state, or by any political subdivision thereof, and that while the Tri-County Company is incorporated under the laws of this state

and owns, operates, manages, and controls within this state an electric light, etc., system, plant, or equipment under privileges granted by the state or political subdivisions thereof," it does not own or operate the same *"for public use"* and is therefore not subject to the jurisdiction of this Board, and

(b) That (Rev Stats 48: 7–5) the section of the Public Utility Act on which the petition of the Jersey Central Company rests only confers upon this Board jurisdiction to settle territorial disputes *between public utilities;* and that since the Tri-County Company is not a public utility because it does not operate for "public use," this Board is without jurisdiction over the Tri-County Company, and over the subject of the petition and this Board therefore is without jurisdiction to entertain the petition and to grant the relief thereby prayed.

[1–3] This Board has considered the record and the comprehensive briefs filed by the parties. On such consideration this Board has reached the conclusion that the Tri-County Company is a "public utility" under the jurisdiction of this Board and that the Board has jurisdiction to entertain and act upon the petition herein and the issues raised thereby. The reasons for this conclusion may be briefly stated.

The Tri-County Company is a corporation of this state and operates, manages, and controls an electric light, heat, and power system, plant, and equipment. In such operation it exercises special privileges in and over the public highways. So much is admitted by the Tri-County Company. The company nevertheless insists that it is not a "public utility," subject to the jurisdiction of this Board because its plant, system, and equipment is not owned, operated, managed, or controlled *"for public use."*

The question raised is one of statutory construction—of the legislative intent with which the words "for public use" were used. In such construction the consequences of adopting the construction for which the Tri-County Company contends must be taken into account.

The Tri-County Company claims that because its capital stock is not offered to the public generally and the issue and holding thereof is limited to members, there is no "public interest" in the issuance thereof and that therefore it does not fall within the regulatory policy declared by the Public Utility Act.

This claim overlooks the fact that the company is, under the act under which it is organized, empowered to borrow money and issue bonds, and other evidences of indebtedness and that neither the act under which it is organized, nor its certificate of incorporation, nor its by-laws restrict it to borrowing from members or to the issuance of its bonds and other evidences of indebtedness to members. This power of public borrowing and public issuance of evidences of indebtedness, involves a "public interest."

The Public Utility Act (Rev Stats 48: 3–9) not only prohibits the issue of any stocks or stock certificates without first obtaining the authority of this Board but imposes like requirements of authorization upon issuance of bonds or other evidences of indebtedness payable in more than one year from the date thereof. The authorization by this Board is made to depend

upon its determination that the proposed issue is in accordance with law and its approval of the purpose.

If the contention of the Tri-County Company is sustained, that company escapes the application of this provision. Further, there is a "public interest" in the financial stability of a utility that enters upon and gains privileges in the public highways as such stability relates to its ability to maintain its structures thereon and thereover in safe and proper condition; yet if the company's position is sustained, the administrative rules to which a public utility is subject requiring a proper relation between its capital stock and bonds and the statutory requirement of maintenance of an adequate depreciation reserve, would be wholly inapplicable.

The Tri-County Company claims that because the service rendered by it is limited to, and its rates are fixed by, its "members" there is no public interest in its service or its rates and therefore reason for state regulation does not exist.

This claim overlooks the fact that the company holds itself out to render service, and does render service, to bodies politic that by the Constitution of this state are prohibited from becoming members of the corporation through, directly or indirectly, owning or holding stock therein—a matter hereafter specifically commented upon. The by-laws of the company provide contrary to such Constitution, that any firm, corporation, or *body politic* may become a member in the company by becoming the owner of one share of the capital stock of the company.

There is a public interest in the rates exacted from and paid by the bodies politic of this state.

[4, 5] The claim also overlooks the fact that the company is by its certificate of incorporation empowered "to exercise any of its powers anywhere" and to conduct "its business in all its branches" in any state, territory, or colony of the United States, and in any foreign country and place and that Rev Stats 40:173–1–3 relating to "Cities Generally," provides that under the conditions there laid down it shall be unlawful for any person, real or artificial, engaged in the business of furnishing electricity for light, heat, or power purposes to refuse to supply electric current for such purposes provided that no corporation, firm, or individual supplying electrical energy shall be compelled to extend its lines or wires more than 250 feet to connect such building unless this Board orders such extension; and provided further, that no corporation, firm, or individual shall be obliged to supply service to any person, persons, or corporation at the time indebted to the corporation, firm, or individual from which such service connection is sought. This statute recognizes a public interest in the supply of electric energy by any "corporation, firm, or individual." The Tri-County enters upon public highways and places and erects poles and other structures thereon. This involves the acquirement of special privileges in these highways and places. There is a public interest in the grant and acquirement of such public privileges.

If the position of the company is sustained the provision of the Public Utility Act requiring the approval of this Board to the effectiveness and

validity of any grant of a privilege or franchise is not applicable to it.

[6] The Public Utility Act requires everyone coming within its provisions to furnish safe, adequate, and proper service and to maintain its property and equipment in condition to perform such service.

In safe service and in the maintenance of property and equipment in condition to perform safe service there is a public interest. Especially is this so where property and equipment occupy public highways and public places.

If the position of the company is sustained, it wholly escapes the application of these provisions as to safe service and the maintenance of property and equipment to perform such service.

The company claims the right to carry its wires over and across the wires of the Jersey Central Company on public highways and public places. Although the company's equipment so located may in its construction or maintenance place the equipment of the Jersey Central Company in jeopardy, and although that latter company is under statutory mandate to maintain its equipment in condition to furnish safe service and this Board is under duty to enforce that mandate, it is nevertheless the claim of the Tri-County Company that this Board is without power to protect the property and equipment of the Jersey Central Company against such construction by the Tri-County Company though it endangers the construction of the Jersey Central Company and puts in jeopardy its ability to furnish safe service and to maintain its property and equipment in condition to render such service.

The Tri-County Company claims that it has the power, though disclaiming its exercise, arbitrarily and at the will of its directors and members to grant its service to one and deny its service to another similarly situated and circumstanced through the grant of membership to the one and its denial to the other.

The general policy of the state is clear. The Public Utility Act prohibits unjust or unreasonable discrimination. Clearly, this prohibition rests upon public interest. If the claim of the Tri-County Company is sustained this fundamental prohibition is inapplicable to it.

Grants of gratuities, preferences, and discriminations to public officials are prohibited by the Public Utility Act. This prohibition voices a public interest. If the claim of the Tri-County Company is sustained it is not subject to this prohibition.

The claim of the Tri-County Company is that it is empowered to render its service anywhere within the state without obtaining the approval of this Board. This claim serves to indicate, if granted, to what extent the fixed policy of the state would be undermined.

Even a municipality under the statutes, owning and operating a plant for supplying light, heat, and power may not enter into a contract with an adjoining municipality to furnish such supply for "public or private use" without the approval of this Board; and may not furnish such service to the inhabitants of such adjoining municipality for public or private use, though such adjoining municipality assents, without this Board's approval. A municipality so serving an adjoining municipality is as to such service de-

clared to be a public utility subject in full to the jurisdiction of this Board. Such approval of this Board depends upon a determination that such adjoining municipality is not "adequately and properly served by an existing company." These provisions extend to service beyond the municipality's limits to a county in which it is situate.

[7] It is far-fetched in the extreme in the light of these statutory provisions to claim, as Tri-County Company claims, that a corporation organized as it is, may enter upon service anywhere irrespective of whether the area to be served is "adequately" and properly served by an existing company, and that the regulatory body set up by the state is wholly without jurisdiction or regulatory control. (Rev Stats 40: 62–12–25.)

[8–10] The Tri-County Company claims that it may without the restraint of requirement of approval by this Board, enter any area within this state in the conduct of its business irrespective of whether or not such area is adequately and properly served by an existing company and that so entering it may arbitrarily serve one and deny service to another like circumstanced at will, and may arbitrarily deny extensions of service within such area.

This claim sounds strange when it is borne in mind that a municipality entering an adjoining municipality with the consent of such municipality must obtain the approval of this Board and entering must render its service without unjust or unreasonable discrimination and must when reasonably required extend its service facilities.

So, too, the Tri-County Company claims not to be subject to the requirements of accounting and report imposed by the Public Utility Act. Yet that requirement has in view comprehensive comparative statistics. The requirement is specifically imposed upon municipalities. If a company, organized as Tri-County is, is not subject to these requirements, the statistics of operation in supplying electric energy will not be comprehensive and the basis of comparison will be incomplete.

The act upon which the petition here is based, above quoted, gives effect to the rule that where a public utility is serving an area, or is ready and willing to serve an adjoining area, with safe, adequate, and proper service at just and reasonable rates, another public utility should not be permitted to enter such area.

Yet the claim of the Tri-County Company is that while the statute affords such protection to the one regulated public utility as against the other regulated public utility, the one is not afforded such protection as against a corporation organized as Tri-County Company is though furnishing a like competing utility service.

If protection is required as against a regulated public utility it is the more required as against unregulated utility service. This Board therefore concludes that the Public Utility Act was designed by the legislature to set up a broad and inclusive scheme of regulation and that the words for "public use" were employed to exclude only operations that were wholly private; operations in which no public interest was involved as where a corporation engaged in business generated electricity for its own use and supplied such energy to its tenants.

Any other construction of the words "for public use" would open an easy way to wholly destroy the regulatory purpose of the Public Utility Act.

The Public Utility Act is a remedial act and should be liberally construed in protection of the public interest it was enacted to conserve, and to further the preventing of the evils which it was designed to end.

II

[11] Even though a narrower construction of the words "for public use" in the Public Utility Act, is adopted, the record establishes that the Tri-County Company operates "for public use."

In the organization of the Tri-County Company there was studied effort to acquire the powers and privileges of a "public utility" and at the same time avoid the prohibitions, restrictions, and regulations to which a "public utility" is by legislative enactments subjected.

The company by its certificate of incorporation declares that "the business of this corporation shall not be operated for profit to this corporation or its shareholders."

Yet the incorporation was not effected under the act relating to "Corporations and associations not for profit" (Rev Stats 15: 1–3) under which a corporation may be formed "for any lawful purpose other than for pecuniary profit."

The reason for this course is clear. A corporation organized under that act would not be entitled to the privilege granted by Rev Stats 48: 7–1 to erect poles upon public highways, streets, and alleys since such privilege is confined to "any corporation organized or to be organized under Rev Stats Title 14, 'Corporations, General.'"

The first of these acts is a membership corporation act; the latter a stock corporation act.

Corporations and associations not for profit and *without capital stock* are limited to organization under the act providing for corporations and associations not for profit. Those who organized the Tri-County Company attempted to give to the corporation all the characteristics of a membership corporate and yet gain for it privileges in the public highways under the stock corporation (Rev Stats Title 14, "Corporations, General") by providing for "capital stock."

Examination of the certificate of incorporation evidences that the so-called "capital stock" and the "stock certificates" are in substance mere indicia and certificates of "membership."

The by-laws recite: "The term 'member' as used in these by-laws shall have the same meaning as the term 'stockholder' as used in the act under which the company is incorporated. The terms 'member,' membership, and stockholder are used in these by-laws interchangeably, a membership necessarily being dependent on the ownership of a share of stock and each stockholder of necessity being a member."

The certificate of incorporation provides that "Any person may become a shareholder of the corporation by becoming the owner of *at least one share* of its capital stock and by: (1) paying in full the sum of $5 for each share purchased; (2) agreeing to purchase from the corporation the amount of electric energy hereinafter specified in subdivision (c) hereof; and agreeing to comply with and become bound by this Certificate of Incorporation and the by-laws of this corporation and any amendments thereto and such rules and regulations as may from time to time be adopted by the board of directors of this corporation."

It provides further that "No shareholder shall own more than one share of stock, and each member shall be entitled to one vote and no more."

It further provides that no person, except the incorporators, or any person accepted for membership by the shareholders at any meeting thereof, shall become a member unless he has been accepted for membership by the affirmative vote of a majority of the members of the board of directors.

The position of a shareholder is exactly what it would have been as a member had no provision been made for the issue of stock.

The certificate of incorporation then proceeds to take from the shares the characteristics of property. It requires a shareholder desiring to sell his share to first offer the same to the corporation, the corporation reserving the *exclusive* right and option to purchase at $5 per share within thirty days after such offer. If the reserved right and option of the corporation is not exercised, the shareholder shall be free to make any other sale *"provided,* however, that no shares of the capital stock of this corporation shall be transferred to any person unless such person is eligible for membership *and becomes* a shareholder and member . . . pursuant and subject to the provisions of this Certificate of Incorporation and the by-laws of this corporation."

The by-laws further take from the shares the characteristics of property by providing that "any member who knowingly, intentionally or repeatedly violates the provisions of the certificate of incorporation or the by-laws or any of the rules and regulations . . . may be required by the Board of Directors to *forfeit* his stock, in which case the company shall refund to such member the purchase price of such share" and that from and after the declaration of such forfeiture all rights, privileges, and benefits of the member shall cease and terminate."

These considerations raise the question whether Tri-County Company is properly organized under "Corporations, General" and whether it has properly acquired under that act the right to erect poles, etc., upon the public highways and places.

We do not conceive it to be our function to determine this question. It is a purely judicial question.

We call attention to it, however, because of a suggestion hereafter made as to enactment of legislation specially providing for the organization of Rural Electrification Companies.

The certificate of incorporation of the Tri-County Company provides that "this corporation shall render no service to or for the public," and among the objects of the corporation sets out that it is formed "to generate, manufacture, purchase, acquire, and accumulate electric energy *for its shareholders* and to transmit, furnish, sell, and dispose of such electric energy *to its shareholders only.*"

The claim is that by force of these restrictive words the Tri-County Company does not own, operate, or control "for public use"; that it is therefore not a "public utility" and is not subject to the jurisdiction of this Board.

If, however, the Tri-County Company in fact operates "for public use," it is a public utility within the definition of the Public Utility Act, and is subject to the jurisdiction of this Board.

The facts of operation, not mere words, determine whether operation is or is not for public use.

The Tri-County Company according to the record holds itself out as ready to serve *all* in the area of its service on compliance with the conditions of stockholding and membership before discussed.

While it claims the *power* to deny service at the will of its members to anyone within the area of service ready to comply with the stockholding and membership requirements, that power has at no time been exercised.

The testimony of the President of Tri-County was to the following effect:

Q. Now before prospective members are voted in what considerations would come up before the proposed member would be taken in? . . .

A. That he was within 1,000 feet of our existing line; that he was a party using electricity, making no difference whether he was the owner or the tenant; the man using the electricity was to pay for the share and be the stockholder, and as long as he was willing to wire the house, or the house was to be wired, and take energy and comply with our rules and regulations, *it was just a routine matter of taking him in as one of the members.* (198)

And again on page 199:

Q. Would you refuse membership to anyone because you didn't, for example, like his looks or his hair or his manner of walking or any such point?

A. None whatever. That is no reason; *as long as he meets the requirements of the company he should get service.*

And again (217):

Q. You say that it wasn't your policy to turn down anybody who wasn't within 1,000 feet of an existing line; is that correct?

A. Of our existing line.

Q. Of your existing line?

A. Yes sir. . . .

(220) *Q.* So that that is your purpose to serve *everybody* in Brown's Mills who is more than 300 feet away from our Jersey Central's lines.

A. Yes sir.

How informal and routine a matter taking one into membership is, is indicated further by the testimony (205): *Q.* According to the minute book you did not have any meeting to elect any stockholders . . . between February 10 and June 9, 1939.

A. There were several meetings in between there.

Q. Yes, but your records show that no stockholders were elected at those meetings.

A. No stock certificates were issued, but the boys had a policy of, when the superintendent would say he had so many new applications along the line, how about them; all right, here is the list, look at the list, and how about it, boys, it is ok; give them energy.

So there were members of the corporation without any record of their acceptance for membership until an order was ultimately made to issue the stock certificates to them, and without such record of acceptance energy was furnished them.

[12] Tri-County Company has, as by the act under which it is organized it is empowered to do, entered upon and located poles and wires upon, within, and along public highways. This grant of power so availed of has resulted in the acquirement by Tri-County Company of special franchises and special privileges, which constitute property. The creation of such special franchises or special privileges in

the public highway can only be justified where the business conducted by means thereof is public in character. The acceptance of such special franchise and special privileges by Tri-County involves recognition of the fact that it operates its equipment for public use in the conduct of a business that is of public character.

Tri-County Company does, according to the record, render service "to or for the public." It does then operate "for public use." It renders service to the Hillsboro school in Madison township. A certificate for a share of capital stock was issued to "Hillsboro school" and delivered to Madison township board of education.

Counsel for Tri-County Company admitted that in this the company was serving a body politic, "Madison township," that is, the Hillsboro school, the Madison township board of education.

Where the authority of Madison township, or the board of education of Madison township, to embark with others upon "consumer ownership" or a coöperative venture does not appear.

What does appear is that the Constitution of the state, Art. 1, Par. 19, provides:

"No county, city, borough, town, township, or village shall hereafter give any money or property, or loan its money or credit, to or in aid of any individual, association or corporation, or become security for, or be directly or indirectly the owner of, any stock or bonds of any association or corporation."

[13] So, too, Tri-County Company according to the record renders service to two religious membership corporations.

We have not been pointed to any statute granting authority to such a corporation to enter into membership in another corporation and so venture in common with others on a consumer-ownership or coöperative business enterprise.

In the absence of a statute granting such authority Tri-County Company must in serving these religious membership corporations be regarded as serving them as consumers and thereby engaged in rendering service "to and for the public" and operating for public use.

[14] The grant to, and acceptance by, Tri-County Company of loans of Federal funds indicates that the company operates "for public use."

This Board agrees with the West Virginia Public Service Commission (Re Harrison Rural Electrification Asso. [1938] 24 PUR(NS) 7, 11 et seq.) which, confronted by similar claims, said, at pp. 12, 13: "Since the loan is from public funds, 'persons in rural areas' for whose benefit it is made must mean 'all' such persons in each such area capable and desirous of receiving such benefit, situated so as to be practically susceptible of receiving the electric service. We do not feel Congress intended public moneys to be advanced for the benefit of a person or class only of the people of an area and denied to others within the area willing and able to receive it. Such funds were evidently intended for all members of the public in the area to be served, and it would be contrary to the legislative intent that membership in this coöperative association should be exclusive and self-determinative. Membership in the association has been actively solicited and no application has been refused. Lines are to be constructed on and across public

roads. Membership in the association and the electric service to be secured through it is of public consequence, affecting the communities and the residents of the area at large. Since Federal funds are not to be advanced for purely private purposes, it follows from the foregoing considerations that the applicant's project must be for the purpose of serving the public generally in the territory where constructed, and that it will render a public service. In other words, it will be a utility with its service available to all the local inhabitants."

These considerations lead us to conclude that Tri-County Company does render service "to and for the public" and does "operate for public use," and is subject to the jurisdiction of this Board even though the words "for public use" be given a more restricted content than this Board has above concluded they should be given.

This Board, therefore, denies the motion of the Tri-County Company to dismiss this proceeding for want of jurisdiction.

There would ordinarily be little difficulty in reaching a conclusion on the merits of this controversy.

The Jersey Central Company has for many years been serving, among other territories, part of Browns Mills, and acquired as early as 1918 all of the Browns Mills Electric Light and Power Company property, including all its right to construct, maintain, and operate overhead and underground systems for distributing and transmitting electric current in Browns Mills, and all franchises, permits, ordinances, and licenses. The area in controversy is contiguous and tributary to that now served by the Jersey Central Company.

Neither Tri-County Company nor Jersey Central is now serving the area in controversy.

Each had begun preparation to serve such area.

It is not necessary to determine which of the two companies first began to prepare to serve such area.

The area in controversy is, as above noted, within the franchise area of the Jersey Central Company. It is immediately contiguous to the area served by that company. It is miles from any area served by the Tri-County Company. The Jersey Central Company was, therefore, entitled, under principles laid down by this Board in prior proceedings, to preference in the area. That company staked its lines in the area and adopted working orders for construction. Under these circumstances that company having voluntarily embarked upon extension of its services into the area could not exact of those served through such extensions, extra charges for such extensions and will be obligated to serve them at its filed schedule rates. In this situation it would ordinarily follow that the Jersey Central should be protected as against the entry by another company into the area.

However, Tri-County Company was actually serving a rural area miles distant. It projected the extension of its lines to Browns Mills, on the urging of a land company engaged in building up a seasonal development there to furnish service in the area in dispute. It was preparing to serve Lemontown, a rural community in a rural area, through what was known as the Pointville-Lemontown spur. It had constructed about 7½ miles of line for the service of Lemontown. Part of this construction was

over "what was then Fort Dix," through Pointville, "not serving anybody in Pointville then down to Lemontown." Part of this construction was on private right of way over lands later acquired by the government. Tri-County Company after the completion of this construction and before service was actually rendered was required by the government to remove its lines from the area so acquired by the government. The result was to leave the line of Tri-County Company through Pointville into Lemontown "without any connection to the distribution system of Tri-County which was feeding it before." Tri-County was then left "with 7½ miles out on a limb"; that 7½ miles of line is without any connection to any other part of the Tri-County system. To correct this situation Tri-County prepared to carry its lines from the "termination of (its) facilities at Boyd's hotel . . . go west in and about State Highway 40, across Whites Bog, through Browns Mills where a right of way area has been cut; then across the Browns Mills area, and then on private right of way into the Pointville or Lemontown spur. This will require the building of approximately 10 miles of lines without regard to any members thereon in order to furnish the Lemontown service.

There is testimony that it will not be financially feasible to so serve Lemontown, except as Tri-County Company is able to serve on Hydranga street and Laurel avenue, the area in Browns Mills here in controversy. Tri-County Company assumed that it was not a public utility; and that it was entitled to serve in the disputed area. It rested its assumption in part upon its construction of a contract between it and Jersey Central Company for division of territory, which contract was ambiguous. It failed to recognize that Jersey Central Company as a public utility company could not effectively agree with another public utility company (much less with a company claiming not to be a public utility), not to further extend into its franchise territory and to restrict and limit its obligation to serve.

The fact that 7½ miles of the Tri-County lines "are out on a limb" and that the investment therein is in jeopardy and that the people of Lemontown cannot be served as originally planned is in no wise the fault of the Tri-County Company. It is the consequence of a step in the National Defense Program.

As previously noted, this Board would not ordinarily reach the conclusion which it has in this case. It reaches its conclusions for the reasons above noted and for the further reason that Tri-County, whether rightfully or not, assumed itself not to be a public utility and we feel that public interest in this case would not be served by jeopardizing the investment already made by Tri-County out of government funds, but rather requires such investment should if reasonably possible be conserved.

Under these circumstances it seems equitable because Jersey Central Company did not until recently manifest any desire voluntarily to enter upon serving in the Browns Mills disputed area and has made no special investment to that end, that Tri-County Company should be permitted to serve so much of the Browns Mills area not now served by Jersey Central Company as will make financially feasible its

now projected line of service to Lemontown.

To that end the Board finds and determines: that the Tri-County Electric Company may make its connection for energizing service to Lemontown in the following manner:

Beginning at Boyd's hotel, thence running in a northwesterly direction to a point opposite Hanover boulevard in Browns Mills, as shown on Exhibit P–2, and continuing westerly along Hanover boulevard to the intersection of Hanover boulevard with Barclay street, thence southerly along Barclay street and Hydranga street to a point 300 feet north of Lake Shore drive, and within 300 feet either side of Hydranga street and Barclay street, and also in a northwesterly direction from the intersection of Hanover boulevard and Barclay street and across the existing lines of the Jersey Central Power & Light Company, across Pine Lake, and thence continuing in a northwesterly direction to a point marked "D" in a circle on Exhibit R–11, where said connection shall be made with the Pointville-Lemontown service.

Tri-County Company shall not serve any customers in Browns Mills along the above-described route except as follows: Barclay and Hydranga street to a point 300 feet from Lake Shore drive and 300 feet either side thereof.

Since no municipality can directly or indirectly own or hold stock in Tri-County Company and since stockholding is essential to membership and to service, this Board will place no limitation upon Jersey Central in supplying street lighting or in the lighting of public buildings and places.

III.

This Board recognizes that there is need for governmentally aided rural electrification service. The need in this state because of uniform system rates is not so great as elsewhere.

It recognizes that the companies furnishing such governmentally aided service will be comparatively local and small.

It recognizes that while they and their operations must be subject to some measure of regulation the burden of regulation readily borne by the larger electric lighting public utility systems, will bear heavily upon them.

This Board will recommend the adoption of legislation specifically providing for the organization of such corporations and simplifying the regulatory provisions as to them.

In the meantime this Board through its power of classification and power to make rules and regulations will do what it can to that end under the statutes as they now stand.

We feel that we should note that this Board finds that those organizing Tri-County Company and others under Federal guidance, and the coercive power of withholding Federal aid, have in the face of comprehensive administrative policy of regulation that our state has adopted in its legislative effort to end the evils of unregulated public utility operation, studiedly sought to obtain all the rights, franchises, and privileges of engaging in an enterprise "affected with a public interest" and at the same time avoid and circumvent by resort to technical and fine-spun distinctions, the application of these policies—to find and take advantage of a policy loophole in the regulatory laws.

The end—rural electrification—a worthy end does not justify the means

adopted where those means involve circuitous methods of accomplishing the end, and point the way, if successful, to wholly nullifying the effort of our state to guard against, and protect the public from, glaring evils.

This Board finds that those organizing Tri-County Company and others under Federal guidance have sought to deny the protection of resort to the courts. The by-laws of the Tri-County Company as above indicated, provide for forfeiture by the board of directors of the company of the share of "capital stock" held by a member, and terminate the right of a member to service upon such forfeiture. The by-laws provide for readmission of such member and restoration of service to him at an annual or special meeting of the stockholders, but provide for no invoking of a special meeting by the one whose stock has been so forfeited and whose right to service has been so terminated. So that one as the result of such forfeiture may, in a given case, be deprived of service for approximately a year, and by force of the by-laws the action of the members if adverse to the one whose stock is forfeited is *"final"*; that is to say—not subject to judicial review.

Particularly has the Board observed that the by-laws containing these provisions have not been furnished to some members until the "first meter reading" when stockholding and membership had already become a completed fact.

This Board has endeavored in all good faith and sincerity not to permit these facts to influence its judgment and conclusions.

It cannot, however, refrain from indicating its judgment that the course, so taken, strikes at respect for law, and raises to a new level the proposition that "the end justifies the means," no matter what evils the means may bring in their train.

Notwithstanding the observations above noted, however, the Board, as already indicated, has reached its determination making due allowance for the fact that this is the first time in this state that the issue respecting coöperative associations has been before this Board, and so that the public moneys heretofore invested by Tri-County may not be wasted, we hereby make as part of this decision the following order, viz.:

Ordered that the cease and desist order heretofore issued by this Board shall remain in force and effect against the said Tri-County except that the same is modified to permit the interconnections for energizing service to Lemontown area, as well as the providing of service in the area of Browns Mills, herein specifically set forth.

SECURITIES AND EXCHANGE COMMISSION

Re United Gas Improvement Company et al.

[File No. 59-6, Release No. 2584.]

Commissions, § 34 — Power to issue injunction.

The Securities and Exchange Commission has no power to order a subsidiary of a registered holding company to cease and desist from operating

facilities even though the company may have acquired the property and the holding company may have guaranteed performance of the subsidiary's obligations without complying with provisions of the Holding Company Act and rules of the Commission, since the only powers of the Commission when such a provision is being violated are, under § 18(f) of the act, 15 USCA § 79r, to bring an action in the proper district court to enjoin the violation, or to transmit the evidence to the Attorney General for criminal prosecution, or both.

[February 27, 1941.]

MOTION *for order directing a gas company, subsidiary of a holding company, to cease and desist from operating certain facilities; motion denied.*

By the COMMISSION: This is a motion by H. Jerome Jaspan[1] for an order directing the Philadelphia Gas Works Company, a subsidiary of The United Gas Improvement Company, "to cease and desist from unlawfully operating facilities for the production and distribution of manufactured gas in the city of Philadelphia." The ground on which we are asked to issue such an order is found in the allegation that the Philadelphia Company acquired the utility assets which it operates by lease from the city of Philadelphia without first securing our approval, in violation of § 9 (a) of the act, 15 USCA § 79i. It is also alleged that The United Gas Improvement Company guaranteed the performance by the Philadelphia Company of its obligations under the issue without submitting the transaction for our scrutiny, in violation of Rule U-12B-1. In support of the motion, it is contended that by reason of the alleged violation of § 9(a), *supra,* and of Rule U-12B-1 both the lease and the guaranty, are void under § 26(b) of the act, 15 USCA § 79z.

(Whether these allegations are true we need not now decide, for as we conceive our authority under the act we must, without regard to the facts, deny this motion for want of power to grant it. This conclusion is inevitable because our only powers, when a provision of the act or of a rule is being violated, are, under § 18(f) of the act, 15 USCA § 79r, to bring an action in the proper district court of the United States to enjoin the violation, or to transmit the evidence to the Attorney General for criminal prosecution, or both.

It should not be overlooked, however, that the allegations made in support of this motion may, if true, be of consequence at some future stage of these proceedings if and when any asserted right of The United Gas Improvement Company to retain the Philadelphia Gas Works Company is at issue.

Nothing in this opinion should be construed as in any way passing upon the truth or legal effect of the matters alleged.)

An appropriate order will issue. [Order omitted.]

By the Commission (Chairman Frank, Commissioners Healy, Eicher, and Pike), Commissioner Henderson being absent and not participating.

[1] By order dated Feb. 7, 1941, the Commission denied an application by H. Jerome Jaspan for leave to intervene in these proceedings but allowed him the right to be heard.

Industrial Progress

Selected information about manufacturers, new products, and new methods. Also news on utility expansion programs, personnel changes, recent and coming events.

$4,000,000 Expansion Program Planned by Iowa Utility

IOWA Electric Light & Power Company plans to spend four million dollars for improvements in its Iowa property, it was announced recently.

Proposed improvements include installation of a high pressure steam generator at both Cedar Rapids and Boone; erection of a transmission line from Cedar Rapids to Marshalltown; installation of a 15,000 kilowatt turbine at Cedar Rapids including a building addition, and installation of additional generating capacity in the Marshalltown or Boone districts.

Speeds Blueprint Reading

A SIMPLIFIED home study method of instruction in reading blueprints of all kinds is announced by Austin Technical Institute, of Newark, New Jersey.

The new system, called the "Shadowgraph" method, is described as easy to grasp by average non-technical minds, and fully effective in practical application.

The "Shadowgraph" method of blueprint instruction is based upon use of actual working models of objects, and projections of shapes and dimensions as shadows are thrown by the sun or other single source of light. The student receives as part of the course a working model containing actual blueprints.

Hygrade Buys Powder Plant

HYGRADE Sylvania Corporation, Salem, Mass., announces the purchase of a fluorescent powder plant at Towanda, Pennsylvania.

Formerly operated as a division of The Patterson Screen Company, the plant has been the principal source of supply for the fluorescent powders used in Hygrade's fluorescent lamps.

Hygrade Sylvania Corporation has lamp manufacturing plants at Salem, Mass. and St. Mary's, Pennsylvania; radio tube manufacturing plants at Emporium, Pennsylvania and Salem, Mass.; and within the past year it acquired an additional plant at Ipswich, Mass. for the manufacture of Miralume fluorescent lighting units. The company employs approximately 4,600 persons, and is the second-largest manufacturer of radio tubes and third-largest manufacturer of lamp bulbs in the United States, in addition to being a recognized leader in the fluorescent lighting field.

Rochester Gas & Electric Adds Two Turbine-Generators

INSTALLATION of a 25,000-kw turbine-generator, now being built, and a 15,000-kw unit, nearing completion, will bring the generating capacity of Rochester Gas and Electric Company's No. 3 Station over 140,000 kw. The new turbine-generators are being built at the Schenectady plant of General Electric; all units in operation at the station at present are likewise of G-E manufacture.

A duplicate of the turbine-generator installed in September 1938, the latest unit ordered is rated 25,000 kw, 3600 rpm. Specifications call for the tandem-compound, double-flow type, with a hydrogen-cooled generator. Steam conditions will be 650 lb. gage pressure, 825 F.

Outdoor Current Transformer Embodys Spirakore Design

A NEW line of outdoor current transformers, embodying the Spirakore design, is announced by F. G. Vaughen, manager of General Electric's meter and instrument division. Recently the Spirakore design was made available in distribution transformers in single-phase ratings up to and including 500 kva.

The new outdoor current transformers are rated 23 and 34.5 kv. Appreciable savings in weight and size are obtained in both ratings as a result of the Spirakore construction. Weight of the new units has been reduced ten per cent in the 23-kv rating and 16 per cent in the 34.5-kv rating. Both units are three inches smaller in diameter, and the 34.5-kv. transformer is also three inches lower than the previous model.

New Line of Cordley Coolers

A COMPLETE new line of Cordley electric water coolers featuring handsome cabinets and 100 per cent increase in cooling capacity is announced by Cordley & Hayes, 443 Fourth Avenue, New York.

The design and performance of 1941 Cordley coolers are the result of 52 years of specialized experience in building water coolers. This new line offers models for use with bottled water or for connecting to city water supply.

Quiet operation, accessibility to working parts provided by front and side panels and gunmetal furniture finish which blends in with any surroundings are added features.

G-M Announces New 97 Horse Power Engine

ANNOUNCEMENT has been made by General Motors Truck and Coach of a new 97 horse power engine, offered as standard equipment in all 2-ton GMC Trucks, and also available at slight additional cost in GMC 1½-ton models.

According to the announcement, GMC's new engine has a displacement of 236 cubic inches, developing 97 horse power at 3,200 r.p.m., and 192.5 lbs. ft. torque at 1,000 r.p.m. It is claimed that this engine offers greater torque or pulling power than any other engine of its size in the light duty truck field

The high torque of this latest "super duty" engine to join the ranks of GMC's valve-in-head engine line has been attained through development of a high-lift cam—with properly coördinated engine timing—which permits a more complete utilization of the high power and economy advantages claimed as inherent in GMC Turbo-Top piston and combustion chamber design.

Kelvinator Sales Soar

SALES of Kelvinator electric refrigerators for the first quarter of the 1941 model year amounted to one-half of the total volume achieved by the company in 1940 and exceeded by a comfortable margin the entire year's sales during 1939.

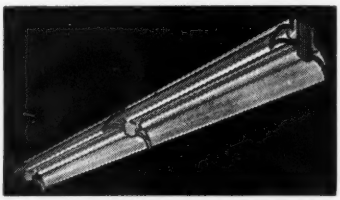
Kelvinator's 1941 sales, according to Frank R. Pierce, general sales manager, reveal a marked trend toward the higher-priced models. This year 80 per cent of the volume is averaging over $160 per unit and this trend is becoming more pronounced.

One of the reasons for the increased business is the sales power of the new high-humidity refrigerators, according to Mr. Pierce, who says that these cabinets were specifically designed to stimulate the replacement business. With the exception of the medium-priced S-6 the most popular model in the entire Kelvinator line is the Moist-Master M-6, which sells for $179.95 and which is one of the two new high-humidity models introduced by Kelvinator this year.

Fluorescent Surface Troffer

THE Edwin F. Guth Company announces a surface troffer which is designed to produce higher levels of fluorescent light with pleasant ceiling illumination assured on both close-ceiling and suspension mountings.

Two types of this new luminaire afford a desirable "add-on" feature, that makes it possible to economically increase lighting capacities at any time without disturbing the original installation. The "base" type, supplied with ornate cast ends, and the "continuous" extension type furnished with a cast joiner, provide simple inexpensive lighting expansions, yet maintain a complete attractive lighting system at all times. The new surface troffer, in sizes for 2 or 3-40 watt fluorescent lamps can be mounted as individual units or in continuous arrangements.



Designed to Produce Higher Levels of Fluorescent Light

The side baffles of the surface troffer effectively shield the lamps. However, additional shielding, if desired, can be had with egg crate louvres. The sturdy Guth louvres are easily installed—small extended arms slide quickly in or out of special slots that securely lock the louvres safely in place.

Gas Griddle and Refrigerator

HOTEL and restaurant departments of gas companies, especially in resort areas, will be interested in a new Thermolator combination griddle and refrigerator unit recently announced by Ershler & Krukin, Inc., Bayonne, N. J.

It is made up of a unit measuring approximately 30 in. x 5 ft. long, and is fitted with a two-section gas fired griddle thermostatically controlled. The top heating arrangement is designed so that the right and left hand griddle section may be operated at different temperatures, or the unit may be operated with only one griddle section being heated at a time. A grease and refuse trough, running the full length of the fixture, is set in a depression at the back so that the griddle surface may be scraped clean and the accumulation removed by lifting out the refuse container, at the convenience of the operator.

The lower base is fitted with four drawers,

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all heavily insulated and complete with a refrigerating unit of the fan type recirculator so as to insure uniformity of temperature. The individual drawers have a perforated bottom and are arranged with ball bearing slides and spring latches so as to open and close evenly.

New Heavy Duty Hydraulic Jack Line Announced

As an addition to their broad line of Simplex lever and screw jacks, Templeton, Kenly & Co., Chicago, recently announced a line of heavy duty hydraulic jacks.

Made in 3, 5, 8, 12 and 20-ton capacity sizes, the manufacturer claims many design and construction advantages including neoprene oil resistant seals, pressure-tested malleable iron top nut and base, a machine ground ram, a fully lapped cylinder, balltype valves, needle type load release, center ram for proper balance and a convenient carrying handle.

Operating features common to all models include lower closed height, higher raised height, lighter weight, leakproof design and provision for operation in either a vertical or horizontal position.

Ruggedly constructed for heavy duty service, these jacks are tested to one and one-half times their rated capacity to insure satisfactory operation and safety for operator and load.

Bulletin H. D.-41 illustrating and describing this line is available from the manufacturer, 1020 South Central Ave., Chicago.

M-D Turbines to Have Turning Gears for First Time

Motor-driven turning gears will be incorporated for the first time in mechanical-drive turbines when three special units now being built by the General Electric Company are completed for the Consolidated Edison Company's Sherman Creek station.

The turbines, rated 1685 horsepower at 4340 rpm., are to be of the condensing automatic extraction type, and will be used for boiler feed pump drive. Two of the units will be in operation at all times, with the third standing by as a spare.

The turning device will keep the rotor of the spare moving at approximately 10 rpm, so that it can be put on the line immediately without requiring any preliminary warm-up. Uniform temperature distribution will be maintained in the slowly turning rotor while cooling, eliminating the possibility of distortion in the shaft.

The three mechanical drive turbines will use steam at 185 lb. gage, 485 F total temperature, 4 lb. absolute back pressure and arranged for automatic extraction at 75 lb. gage.

They will be ready for service early this fall, and will be used in conjunction with a new high-pressure turbine-generator unit now being installed.

Mozart Fluorescent Fixtures

Suspension fixtures for installation of fluorescent lights at the ceiling are offered by the Mozart Specialty Corp., Chicago, manufacturer of industrial, commercial and residential lighting fixtures.

These new fixtures provide bright light at low wattage without the heat of the incandescent lamp. There are two, three and four-tube units, the tubes snapping into bakelite sockets, while the starter switch and reactor, which are approved by the Underwriters' Laboratory, are built into the fixture.

The fluorescent tubes are available in "sunlight," warm white, green, blue, red, pink and gold.

Further information, including descriptive literature and price list, may be secured from the manufacturer, 1535 North Ashland Avenue, Chicago, Illinois.

Hartford Electric Light Co. To Increase Output

Capacity of the South Meadow Plant of the Hartford Electric Light Company will be increased to 175,000 kw with installation of a 45,000-kw turbine-generator now being built by General Electric.

Present output of the station is 130,000 kw, supplied by five units, all of which were furnished by G-E.

The new turbine-generator is similar to a unit installed in September, 1938. It will be of the tandem-compound, double-flow type, with a hydrogen-cooled generator. Steam conditions will be 850 lb. gage pressure, 900 F.

New M.S.A. "Coolband"

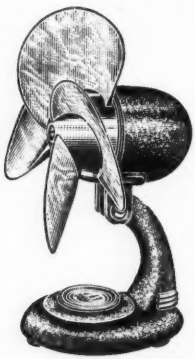
Announcement is made by Mine Safety Appliances Company of the New M.S.A. "Coolband"—a modern perspiration retainer for men on hot jobs. The Coolband betters hot working conditions by preventing sweat in the eyes, and on goggles or glasses. It stops continual face-mopping and other deterrents to continuous work arising from uncontrolled head perspiration.

The M.S.A. Coolband offers all-around-the-head absorption. It consists of a soft, flexible band which encircles the head—clinging softly without binding, and creating a cooling effect through constant absorption of perspiration.

Sanitation is esily maintained, and the Coolband may be disinfected at will. Any part of the band can be quickly and easily wrung out. Complete details may be secured by writing to the manufacturer, Braddock, Thomas and Meade Sts., Pittsburgh, Pa.

Safe-Flex Fan for Hard to Ventilate Corners

SAMSON United Corporation, Rochester, N. Y. announces No. 1040, Safe-Flex 8 in. sta-



Safe-Flex No. 1040.

tionary fans for home and office use. No. 1040 Safe-flex is said by the manufacturer to be ideally suited for small rooms and "hard to ventilate" corners.

Equipment Literature

Allis-Chalmers Transformer Bulletin

Allis-Chalmers Mfg. Company, Milwaukee, Wis., has announced Bulletin B-6159 on the new Standard Distribution Transformers that meet all recommendations in first report of the E.E.I.-NEMA joint committee on transformer standards. Its well-illustrated pages cover the design and construction features, as well as dimensions, price lists, and electrical data for sizes of 1½ KVA to 25 KVA for standard voltages of 2400 to 13,200 inclusive.

Autovalve Lightning Arresters Booklet

Station type autovalve lightning arresters designed to provide the maximum protection from lightning surges are described in a new 32-page booklet announced by Westinghouse Electric and Manufacturing Company. The arresters described have ratings from 3 to 240 kv.

Electrical principles involved in the arrester functions are discussed with a note on protective ratios. Applications to grounded and ungrounded neutral circuits and hydroelectric systems are described.

Distinctive features, construction, and unit design details are explained and illustrated with cutaway views. Line diagrams give complete physical dimensions. Performance characteristics are shown on typical oscillogram test strips.

An interesting map of the United States showing annual isoc[illegible]unics of total thunderstorm days, 1904-1933 is reprinted on page 31.

A copy of Catalog Section 38-120 may be secured from department 7-N-20, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pennsylvania.

"Formcraft" Service for Executives

An attractive brochure titled "Formcraft" explaining the development and need for a new service for business executives, has been published by The Standard Register Company, Dayton, Ohio.

Formcraft is a gratuitous service for busy office managers, purchasing agents and other business executives. This newly developed science takes upon itself all the burden of designing business forms. A staff of skilled Formcrafters designs forms for maximum operating efficiency and, at the same time styles them for prestige, especially if the forms are used externally.

A copy of this booklet will be mailed free of charge on request.

Wheelco Instruments Co. Catalog

Wheelco Instruments Company, 1929 South Halsted St., Chicago, has recently issued a catalog designed to provide a convenient, condensed listing of the principal items of remote control, temperature control and recording equipment manufactured by this company.

It is pointed out that this is not a complete catalog. The company will send a complete Wheelco catalog to anyone interested. Individual bulletins as designated in the condensed catalog will be supplied to provide detailed information of specific instruments.

Wheelco sales and service engineers are located in all principal cities. Requests for information about equipment, or for engineering service on any problem will be given prompt attention both by the company's representatives and the home office.

G-E Publications

The following publications have recently been issued by the General Electric Company, Schenectady, New York: G-E Heating Cable (GEA-3539); Multiple-Operator Arc-Welding Systems (GEA-569F); Selsyns (GEA-2176); G-E Plugging Control (GEA-3571); How to Select Control for D-C Motors, (GEA-3531); Heavy-Duty Automatic Network Protector (GEA-2017B); 17 Safeguards on G-E Lead Press (GEA-3394).

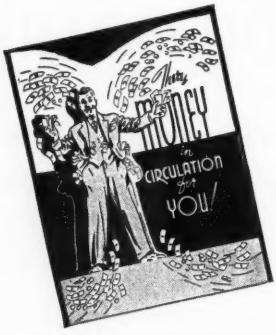
Kisco 1941 Sales Manual

Kisco Company, Inc., St. Louis, Missouri, announces its new 1941 "Take Off" for Circulair profits. This is a 48 page sales manual,

Equipment Literature (Cont'd)

profusely illustrated. Its copy discusses experienced and practical methods of increasing profits through the sale of the nationally known Kisco Circulair units.

Kisco has added three new units to its lines



in 1941. Through its extensive dealer organization sales volume has been such that several of the more popular models have been reduced in price.

Copies of the manual may be secured without charge by writing the Kisco Company, Inc.

Silex Glass Coffee Maker Catalog

The Silex Company has issued a catalog which illustrates, describes, and gives prices effective April 15th of the new and shorter line of Silex Glass Coffee Makers.

The presentation of this catalog is in line with the new improved Silex policy of making it as simple as possible for dealers to handle the Silex line. The new short line includes only fast-moving coffee makers—both wide neck and narrow neck, and two coffee services. This shorter line greatly reduces the variety of stock numbers necessary for dealers to carry. Dealers will note that a free supply of strainer cloths is included with all units, as well as a Dippex coffee measure. Wherever other equipment is supplied, such as moldex table mats, lower bowl covers, etc., these are clearly illustrated.

The catalog also contains a diagramatic view of a Genuine Silex Glass Coffee Maker, showing its main points and features.

Power Circuit Breaker Application Discussed

A new 31-page application data leaflet describing the application of power circuit breakers is announced by Westinghouse Electric and Manufacturing Company. Its purpose is to assist purchasers of circuit breakers in arriving at a prompt and satisfactory choice of the many breakers available. Reference numbers to further descriptive data are given wherever the information is incomplete.

The method of estimating the short-circuit current through a system is discussed in detail. Included in the discussion are factors affecting the rms current at any point of a system under short circuit conditions. A general treatment of short circuit transients is also given.

Thirteen pages of tables list the data necessary for the selection of the proper breaker for a given service. Instructions for the tables are included in specific examples used as aids in interpreting the data listed in the bulletin.

Copies of application data 33-115 may be secured from department 7-N-20, Westinghouse Elec. & Mfg. Co., East Pittsburgh.

New Pump Bulletin

Allis-Chalmers Mfg. Company, Milwaukee, Wis., has issued a new comprehensive 40-page Bulletin B-6146 for every pumping service requiring a high grade single-stage double-suction centrifugal pump. In addition to construction features, pump dimensions, normal and special application data, this well illustrated bulletin presents friction tables, head-capacity tables, and other valuable pump engineering information.

Manufacturers' Notes

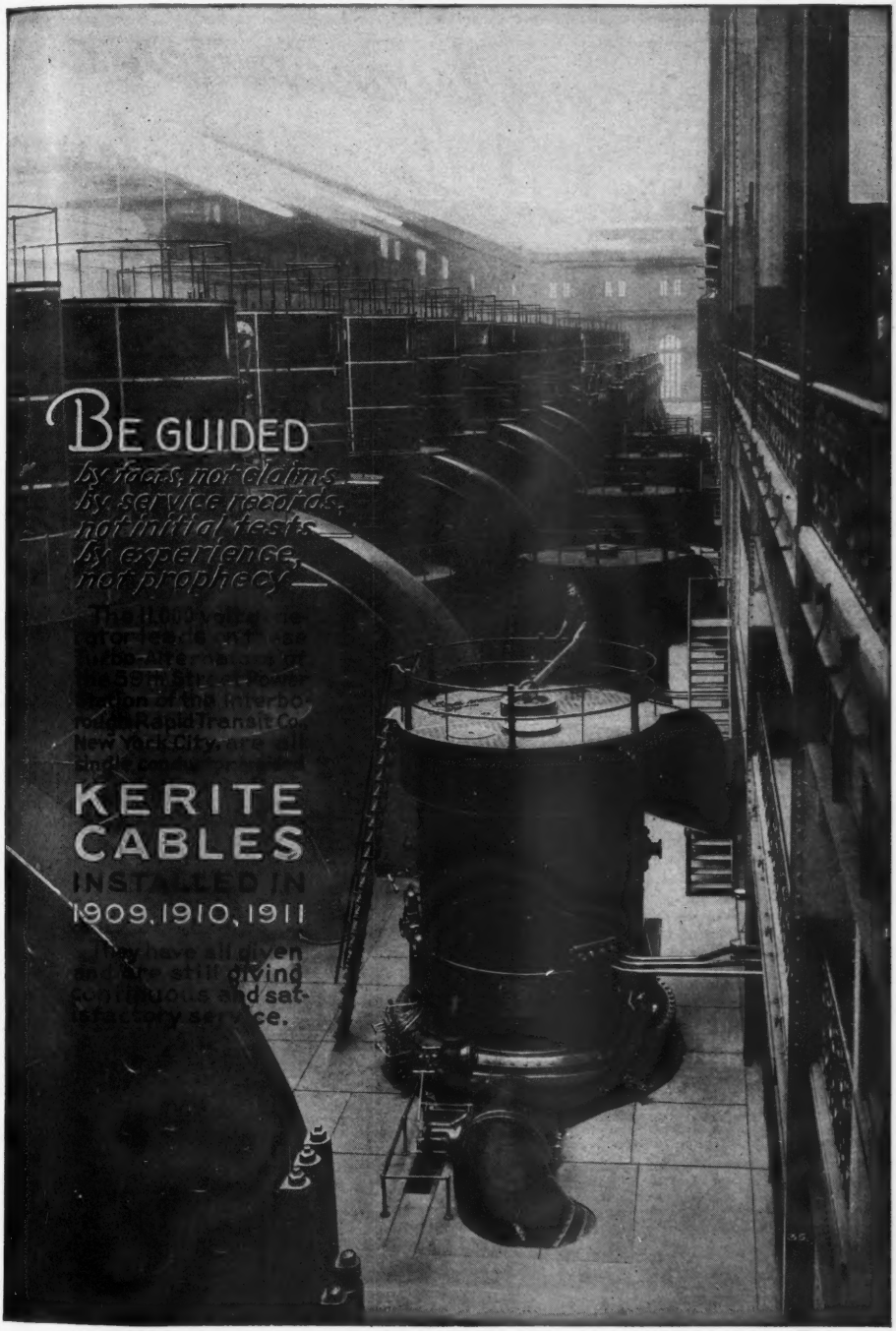
G-E Appointments at Fort Wayne Works

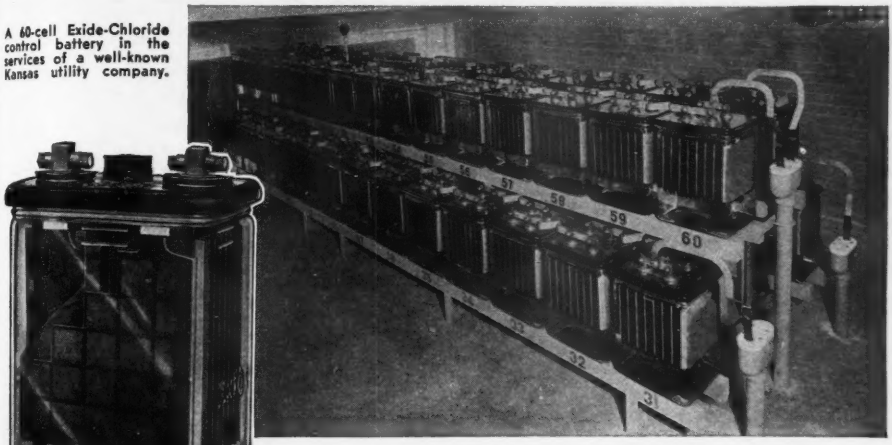
Three appointments at the Fort Wayne Works of the General Electric Company have been announced by works Manager M. E. Lord. C. H. Matson, who has been serving as general superintendent, has been appointed assistant manager; R. H. Chadwick has become assistant to the manager in charge of engineering; E. J. Thomas has been appointed engineer of the specialty transformer department.

Society Research Laboratory Appointment

A. E. Stacey, Jr., chairman of the American Society of Heating and Ventilating Engineers' Committee on Research, announces the appointment of E. C. Hach, Westfield, N. J., to the staff of the Society Research Laboratory located at the Experiment Station of the U. S. Bureau of Mines in Pittsburgh, Pa. Mr. Hach comes to the Laboratory with an extensive background of experience in which he has served as chief engineer of the manufacturing department of Standard Air Conditioning, Inc., a division of American Radiator & Sanitary Corporation, New York, where he was in charge of research development and product design.

Prior to this connection he was employed by the Carrier Corporation, Syracuse, N. Y., where he was engaged in research and development work both in the laboratory and in the field, and he also has held positions with the Beckwith Co. in Dowagiac, Mich., Western Electric Co., Cicero, Ill., and the Mutual Fire Prevention Bureau, Chicago, Ill.





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PROFESSIONAL DIRECTORY (*continued*)

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